

APPENDIX C

109 FERC ¶ 61,324
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
Nora Mead Brownell, Joseph T. Kelliher,
and Suedeem G. Kelly.

Sabine Pass LNG, L.P. Docket No. CP04-47-000

Cheniere Sabine Pass Pipeline Company Docket Nos. CP04-38-000
CP04-38-001
CP04-39-000
CP04-40-000

ORDER GRANTING AUTHORITY UNDER SECTION 3 OF THE NATURAL
GAS ACT AND ISSUING CERTIFICATES

(Issued December 21, 2004)

1. On December 22, 2003, Sabine Pass LNG, L.P. (Sabine LNG) filed an application under section 3(a) of the Natural Gas Act (NGA) to site, construct and operate a liquefied natural gas (LNG) terminal to be located near the Sabine Pass Channel, Cameron Parish, Louisiana. On the same date, Cheniere Sabine Pass Pipeline Company (Cheniere Sabine Pipeline) filed an application, as amended,¹ under section 7(c) of the NGA to construct, own and operate a 16-mile long, 42-inch diameter pipeline from the proposed LNG terminal to Johnsons Bayou, Louisiana; (2) to provide open access transportation services under Subpart G of Part 284 of the Commission's regulations; and (3) to engage in certain self-implementing routine activities under Subpart F of Part 157 of the regulations.

2. In this order, the Commission finds that the Sabine LNG and Cheniere Sabine Pipeline authorizations are in the public interest, subject to the conditions discussed herein. Specifically, the order approves Sabine LNG's proposal under section 3 to construct and operate its LNG import terminal. This order further approves Cheniere

¹ Cheniere Sabine Pipeline amended its application on February 4, 2004, to reflect, among other things, a shortening of its proposed pipeline route from 120 miles to 16 miles to minimize impact to sensitive wetlands.

Sabine Pipeline's proposal to construct, own and operate a 16-mile long pipeline connecting the LNG terminal to the pipeline's terminus at Johnson's Bayou and its proposal to offer open access transportation services on its pipeline under Part 284. Its proposed initial rates and terms and conditions of service for the open access transportation services are accepted subject to conditions and modification. The order finds that the public interest is served by allowing the introduction of competitively priced imported LNG to increase and diversify energy supplies and helping to respond to the emerging natural gas supply shortage in this country.

I. Proposals

3. The Sabine LNG project will receive, store, and vaporize foreign source LNG, which will then be sent out of the terminal facilities through an onsite metering station which will connect the Sabine LNG facilities to the Cheniere Sabine Pipeline. The Cheniere Sabine Pipeline will then transport the imported natural gas to points of interconnection with existing intrastate and interstate pipelines, thereby accessing various markets throughout the United States. Sabine LNG and Cheniere Sabine Pipeline are affiliated companies.² Both applicants submit that the need for the LNG terminal and associated pipeline is supported by trends that forecast growing demand for natural gas just as traditional sources of domestically produced gas are in long-term decline.

A. Sabine LNG's Proposal

4. In Docket No. CP04-47-000, Sabine LNG seeks authorization under section 3(a) of the NGA to site, construct and operate: (1) an LNG marine terminal (including a turning basin, two protected berths and associated piping and appurtenances); (2) an LNG storage and vaporization facility (including three LNG storage tanks, vaporization units and associated piping and control equipment); and (3) associated utilities, infrastructure and support systems. The marine terminal will have the capability of unloading approximately 300 ships per year with ship capacities ranging up to 250,000 cubic meters of LNG.

² Sabine LNG and Cheniere Sabine Pipeline are, respectively, a limited partner of and a wholly owned subsidiary of Cheniere LNG, Inc. (Cheniere LNG). Cheniere LNG has a limited partnership interest in Freeport LNG Development, L.P. and an ownership interest in Corpus Christi LNG, L.P., both of which have filed applications with the Commission to site, construct and operate LNG import facilities in Texas.

5. The Sabine LNG project will be located in Cameron Parish, Louisiana. The project will import, store, and vaporize an average of approximately 2.6 billion cubic feet per day (Bcf/d) of LNG, with a total plant capacity of 2.8 Bcf/d. The vaporized LNG will be sent out of the terminal facilities through an onsite metering station which will connect the LNG terminal facilities to the Cheniere Sabine Pipeline.

6. The Sabine LNG project will use approximately 568 acres of private land under a long-term lease. Approximately 236.6 acres will be required for the construction and permanent operation of the facility and 55.1 acres will be used as temporary workspace during construction.

7. Sabine LNG submits that the terminal will have limited environmental impact, since the project site has been disturbed previously by dredge material replacement, dewatering structures, oil and gas operations, and levee construction. Moreover, it states that the construction of the project will have a beneficial effect because certain dredged material will be used to stanch shoreline erosion on the Gulf of Mexico at Louisiana Point.

8. Sabine LNG states that it has no contracts for the receipt of LNG but intends to begin negotiations with potential users of the terminal capacity.³ Sabine LNG states that the economic risks of the Sabine LNG will be borne fully by the owners of the project and that it has no existing customers who might be adversely affected by the risk of cost recovery for the project.

9. Sabine LNG requests that its application be processed expeditiously so that it may commence operations prior to the 2007 winter heating season.

B. Cheniere Sabine Pipeline's Proposal

10. In Docket No. CP04-38-000, as amended in Docket No. CP04-38-001, Cheniere Sabine Pipeline requests authority pursuant to section 7(c) to construct, own and operate approximately 16 miles of 42-inch diameter natural gas transmission pipeline; two metering stations/delivery points with multiple potential pipeline interconnects, one of which is co-located with the pig receiver facilities; pigging facilities consisting of a launcher facility at the Sabine LNG terminal where the pipeline begins and a receiver facility at the pipeline's end at Johnsons Bayou; and three mainline valves, two of which

³ According to recent press reports Total LNG USA, Inc. has agreed to acquire 1 Bcf/d of capacity at the Sabine LNG terminal (Business Wire, Nov. 9, 2004), while ChevronTexaco has secured 700 million cubic feet per day of capacity at the terminal (PRNewswire – Firstcall, Nov. 9, 2004).

are co-located with pigging facilities. The pipeline facilities are designed to transport up to 2.6 Bcf/d of natural gas. The cost of the proposed pipeline and associated facilities will be approximately \$90 million dollars as detailed in amended Exhibit K.

11. The Cheniere Sabine Pipeline will originate at the Sabine LNG terminal and run easterly to a proposed delivery point and interconnect with the interstate pipeline system of Natural Gas Pipeline Company of America (Natural). It will then continue in an easterly direction, following an existing pipeline corridor for approximately 16 miles to the proposed Johnson's Bayou delivery point, which will be located close to multiple gas processing facilities and multiple pipelines, thereby gaining access for the imported gas to pipelines that have markets in the Midwest, Northeast, Southeast and the Gulf Coast regions of the United States.⁴

12. The proposed pipeline will use a total of 245.8 acres for construction and operation of the proposed facilities. Following construction, a total of 98.6 acres will be maintained as new permanent easement or used for operational facilities along the pipeline. The proposed pipeline will be constructed parallel to established roadway or utility rights-of-way for approximately 14.3 miles, or approximately 83 percent of the total pipeline length.

13. At the conclusion of an open season for the new pipeline's firm capacity, Cheniere Resources, Inc., an affiliate of Cheniere Sabine Pipeline, was awarded all the capacity. In a filing made on May 12, 2004, Cheniere Sabine Pipeline submitted copies of the offer sheet and binding precedent agreement for the pipeline capacity.

14. Cheniere Sabine Pipeline is a transportation-only pipeline and will provide its transportation services on an unbundled, open access basis under non-discriminatory terms and conditions. The pipeline will offer cost-based firm (Rate Schedule FTS), interruptible (Rate Schedule ITS) and parking and lending (Rate Schedule PALS) transportation services.

15. The *pro forma* tariff is set forth in the original application as Exhibit P. Cheniere Sabine Pipeline states that it will file to make its *pro forma* tariff effective upon the pipeline's in-service date which to be coordinated with the in-service date of the Sabine Pass LNG Project in time for the 2007 winter heating season.

⁴ Anticipated take away capacity at interconnecting facilities may include existing pipelines in the project area that are owned by Transcontinental Gas Pipe Line Corporation (Transco), Texas Gas Transmission Corporation, Louisiana Resources Pipeline Company and Natural. Amended application at Exhibit F-1, Resource Report 1, p. 2.

16. In Docket No. CP04-40-000, Cheniere Sabine Pipeline requests a blanket certificate under Subpart G of Part 284 of the Commission's regulations authorizing it to provide transportation services on an open access basis.

17. In Docket No. CP04-39-000, Cheniere Sabine Pipeline requests a blanket certificate under Subpart F of Part 157 of the Commission's regulations to authorize it to perform routine activities in connection with the construction, maintenance and operation of the facilities proposed in its application.

II. Notice, Interventions, Comments and Protest

18. Notice of the Sabine LNG and the Cheniere Sabine Pipeline applications was published in the *Federal Register* on January 2, 2004 (69 Fed. Reg. 1701). Interventions were due on or before January 23, 2004. A number of timely, unopposed interventions were filed.⁵ Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure. (18 C.F.R. § 385.214(a)(3) (2004)).

19. Sempra Energy LNG, Statoil ASA and Statoil Natural Gas LLC and Florida Gas Transmission Company filed late motions to intervene. The Commission finds that granting these late-filed motions to intervene at this early date will not delay, disrupt, or otherwise prejudice this proceeding, or place an additional burden on existing parties. Therefore, for good cause shown, we will grant the late-filed motions to intervene. (18 C.F.R. § 385.214(d) (2004)).

20. Comments were filed by Transco. A protest was filed by W&T Offshore, L.L.C. (W&T). W&T's protest is addressed in the environmental discussion of this order.

21. Transco notes that section 20 of Transco's FERC Gas Tariff sets forth the terms and conditions governing the construction of interconnects with its pipeline system. Therefore, Transco reserves its rights under section 20 with regard to any interconnection to its system proposed by Cheniere Sabine Pipeline.

⁵ Motions to intervene were filed by the following parties: Freeport LNG Development, L.P., FPL Group Resources LLC, Texas Gas Transmission, LLC, ExxonMobil Gas Marketing Co., BP Energy Co., Encana Gas Storage Inc., Weaver's Cove Energy LLC, Natural, Total Gas & Power North America, Inc., ConocoPhillips Co., Calpine Corp. and Southern LNG, Inc.

III. Discussion

A. Sabine LNG's Proposed Terminal

22. Because the proposed LNG terminal facilities will be used to import gas from foreign countries, the construction and operation of the facilities and site of their location require approval by the Commission under section 3 of the NGA.⁶ The Commission's authority over facilities constructed and operated under section 3 includes the authority to apply terms and conditions as necessary and appropriate to ensure that the proposed construction and siting is in the public interest.⁷ Section 3 provides that the Commission "shall issue such order on application..." if it finds that the proposal "will not be inconsistent with the public interest."

23. The Commission has chosen to exercise a less intrusive degree of regulation for LNG import terminals, and does not require the applicant to offer open-access service or to maintain a tariff or rate schedules for its terminalling service.⁸ However, the Commission reserves the authority under section 3 to take any necessary and appropriate action if it receives complaints of undue discrimination or anticompetitive behavior.

24. The Commission recognizes the important role that LNG will play in meeting future demand for natural gas in the United States and has noted that the public interest is served through encouraging gas-on-gas competition by introducing new imported supplies.⁹ The record in this case shows that the Sabine LNG terminal will provide such

⁶ The regulatory functions of section 3 were transferred to the Secretary of Energy in 1977 pursuant to Section 301(b) of the Department of Energy Organization Act (Pub. L. No. 95-91, 42 U.S.C. §§7101 *et seq.*). In reference to regulating the imports or exports of natural gas, the Secretary subsequently delegated to the Commission the authority to approve or disapprove the construction and operation of particular facilities, the site at which facilities shall be located, and with respect to natural gas that involves the construction of new domestic facilities, the place of entry or exit for exports. DOE Delegation Order No. 00-044.00, 67 *Fed. Reg.* 8,946 (2002). Accordingly, applications for authority to import natural gas must be submitted to the Department of Energy. The Commission does not authorize importation of the commodity itself.

⁷ *Distrigas Corporation v. FPC*, 495 F.2d 1057, 1063-64), *cert. denied*, 419 U.S. 834 (1974); *Dynegy LNG Production Terminal, L.P.*, 97 FERC ¶ 61,231 (2001).

⁸ *See Hackberry LNG Terminal, L.L.C.*, 101 FERC ¶ 61,294 (2002), *order issuing certificates and granting reh'g*, 104 FERC ¶ 61,269 (2003).

⁹ *Hackberry LNG*, 101 FERC ¶ 61,294 at P 26 (2002).

additional supplies of natural gas to consumers. Because the project is new, Sabine LNG has no existing customers who might be adversely affected by the costs or risk of recovery of the costs associated with the proposed LNG terminal project. The economic risks will be borne by Sabine LNG. Therefore, we find that, subject to the conditions imposed in this order, that the Sabine LNG terminal is not inconsistent with the public interest.

B. Cheniere Sabine's Proposed Pipeline

25. Since the proposed pipeline facilities will be used to transport natural gas in interstate commerce subject to the jurisdiction of the Commission, the construction and operation of the facilities are subject to the requirements of subsections (c) and (e) of section 7 of the NGA.

1. The Certificate Policy Statement

26. On September 15, 1999, the Commission issued a Policy Statement¹⁰ providing guidance as to how proposals for certificating new construction will be evaluated. Specifically, the Policy Statement explains that the Commission, in deciding whether to authorize the construction of new pipeline facilities, balances the public benefits against the potential adverse consequences. Our goal is to give appropriate consideration to the enhancement of competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, the avoidance of unnecessary disruptions of the environment and the unneeded exercise of eminent domain in evaluating new pipeline construction.

27. Under this policy the threshold requirement for existing pipelines proposing new projects is that the pipeline must be prepared to financially support the project without relying on subsidization from the existing customers. The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the applicant's existing customers, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of a new pipeline. If residual adverse effects on these interest groups are identified after efforts have been made to minimize them, the Commission will evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse

¹⁰*Certification of New Interstate Natural Gas Pipeline Facilities (Policy Statement)*, 88 FERC ¶ 61,227 (1999); *Order Clarifying Statement of Policy*, 90 FERC ¶ 61,128 (2000); *Order Further Clarifying Statement of Policy*, 92 FERC ¶ 61,094 (2000).

effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission then proceed to complete the environmental analysis where other interests are considered.

28. The threshold requirement is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. Cheniere Sabine Pipeline is a new pipeline and has no existing customers. Thus, there will be no subsidization. Therefore, we find that Cheniere Sabine Pipeline has satisfied the threshold requirement of the Policy Statement.

29. Cheniere Sabine Pipeline also meets the remaining criteria for certification of new facilities set forth in the Policy Statement. There will be no adverse effect on existing services because Cheniere Sabine Pipeline has no current customers. The new pipeline should also benefit Cheniere Sabine Pipeline's anticipated interconnecting pipelines by providing new sources of gas for them to transport. With the exception of Transco's comment in which it reserves the right to apply the terms in its own tariff to possible interconnections with Cheniere Sabine Pipeline, no existing shippers or pipelines in the area have protested the filing. No landowner or community member objected to the proposed pipeline route, 83 percent of which is to be built along existing rights-of-way. For these reasons we find that any adverse impacts on landowners and communities will be minimal.

30. The need for the Cheniere Sabine Pipeline is supported by historical and projected trends in gas demand and supply. Various national and industry organizations that monitor energy consumption trends forecast growing demand for natural gas although traditional sources of domestically produced gas are in long-term decline. The data shows that forecasted domestic production will be unable to keep pace with demand and that the gap will only widen in the future. It is expected that imports, including LNG, will be necessary to make up the supply gap.¹¹ The Sabine LNG and Cheniere Sabine Pipeline projects are being developed to provide access to new, competitively priced LNG supplies to meet this growing demand. Based on the benefits Cheniere Sabine Pipeline will provide to the market and the lack of any identified adverse effect on existing customers, other pipelines, landowners, or communities, we find, consistent with the Policy Statement and section 7 of the NGA, that the public convenience and necessity requires approval of Cheniere Sabine Pipeline's proposals.

¹¹ See Amended application, Exhibit F-1, Resource Report 1 at pp. 2-3.

2. Rates

31. Cheniere Sabine Pipeline proposes to offer cost-based firm (Rate Schedule FTS) and interruptible (Rate Schedules ITS and PALS) open access transportation services on a non-discriminatory basis under Part 284 of the Commission's regulations.¹² Cheniere Sabine Pipeline states that the proposed cost-based rates reflect a straight fixed-variable (SFV) rate design and are calculated for the total 20-year life of the project. Cheniere Sabine Pipeline first prepares estimated costs of service for each year of the 20-year project based on what it refers to as an "original cost" basis using an annual straight line depreciation accrual rate of 5 percent. It then states that it "levelizes" each of the annual costs of service for years 1 through 10 at \$19,472,218 by varying the annual depreciation accrual rates.¹³ For the remaining 10 years of the project, Cheniere Sabine Pipeline uses the annual costs of service which it claims it calculated on an original cost basis.

32. Although Cheniere Sabine Pipeline has made no firm financing arrangements, Cheniere Sabine Pipeline anticipates that 50 percent of the capital will be furnished by the owners as equity and that 50 percent will consist of debt. Assuming this debt level, Cheniere Sabine Pipeline expects to raise approximately \$44.8 million of debt from commercial banks and/or insurance companies at an effective interest rate of 8 percent to be retired over a period of 15 years. Cheniere Sabine Pipeline states that the terms and conditions applicable to the debt will depend upon financial market conditions existing at the time the debt is raised but that it will seek the most favorable terms available in the marketplace at the time of financing, and the debt will be non-recourse to Cheniere Sabine Pipeline. Cheniere Sabine Pipeline also proposes a 14 percent return on equity (ROE) based on such factors as its form of incorporation, project risks, proposed capital structure and anticipated capital market conditions. Cheniere Sabine Pipeline requests an overall after-tax rate of return of 11 percent.

¹² See Cheniere Sabine Pipeline's FERC Gas Tariff, *Pro Forma* Original Volume No. 1 (*pro forma* tariff).

¹³ Cheniere Sabine Pipeline's year 1 proposed levelized cost of service consists of \$3,017,579 of operation and maintenance expenses, \$1,825,364 of depreciation expenses, \$9,739,975 of return allowance (at 14 percent rate of return on equity), \$4,279,858 of federal income taxes and Louisiana state income taxes (calculated at tax rates of 35 percent and 8 percent, respectively), and \$609,441 of taxes other than income taxes, for a total cost of service of \$19,472,218. For year 1, Cheniere Sabine Pipeline reflects a proposed rate base comprised of gross plant investment of \$89,623,699, less accumulated depreciation of \$912,682, less accumulated deferred income taxes of \$496,032, plus working capital of \$104,144, for a total rate base of \$88,322,129.

33. The FTS rates are derived using the \$19,472,218 annual cost of service and annual FTS reservation determinants of 32,760,000 MMBtu (2,730,000 MMBtu per day times 12 months). The annual FTS usage determinants total 647,692,500 MMBtu and represent 65 percent load factor of the maximum capacity. The proposed maximum cost-based FTS reservation rate is \$0.5944 per MMBtu. Cheniere Sabine Pipeline states that it currently has no variable costs, so the proposed FTS usage rate is \$0 per MMBtu.

34. The ITS rate is derived at 100 percent load factor of the FTS rates. Cheniere Sabine Pipeline has not identified any usage determinants associated with its proposed ITS interruptible service. The proposed maximum ITS rate is \$0.0195 per MMBtu, and the same rate is proposed for PALS parking and lending service. Cheniere Sabine Pipeline states that it does not anticipate any use of PALS service in its early years of operation, given that a similar service may be provided by other pipelines (with larger systems that include storage) located directly downstream of Cheniere Sabine Pipeline. For both its firm and interruptible services, Cheniere Sabine Pipeline estimates zero percent retainage for fuel, loss and unaccounted for gas.

35. We have reviewed the proposed cost of service and proposed initial rates, and generally find them reasonable for a new pipeline entity, such as Cheniere Sabine Pipeline, subject to the modifications and conditions imposed below.

a. Cost of Service Rate Designs

36. Cheniere Sabine Pipeline's rate proposal incorporates two distinct cost recovery concepts for the 20-year project life. It proposes rates based on levelized costs of service that remain unchanged for each of the first 10 years of operation. It also calculates what it refers to as original costs of service for years 11 through 20, but does not propose rates based on those costs of service levels to be placed into effect for each year of that remaining 10-year period. Cheniere Sabine Pipeline has not cited any Commission cases to support its proposal. When asked to explain the goals and objectives that it is trying to achieve by using levelized and original cost of service approaches and why it did not levelize the cost of service and rates over the entire 20-year project life, Cheniere Sabine Pipeline responded that it designed its initial reservation rate based on a 10-year levelized cost of service because it expected initial firm contracts of only 10 years in duration. Cheniere Sabine Pipeline also stated that it intends to address the cost of service and rate design for the second 10-year period at the time the original contracts are replaced or renewed.¹⁴

¹⁴ See Cheniere Sabine Pipeline's response to the August 12, 2004 staff information request no. 7.

37. In the past, the Commission has approved levelized cost of service rate designs finding that they can provide just and reasonable rates. However, Cheniere Sabine Pipeline's proposal deviates from levelized cost of service rate designs previously approved by the Commission for other pipeline proposals related to new LNG projects in a number of important ways.¹⁵ In this case, Cheniere Sabine Pipeline has proposed to only levelize the cost of service and rates for the first 10 years of service but has not proposed other rates to apply to service for a 20-year period even though the underlying premise for Cheniere Sabine Pipeline's cost of service and rates is based on the entire 20-year life of the project.¹⁶ Cheniere Sabine Pipeline's proposed rates based only of levelized costs for years 1 through 10 are not consistent with the 20-year term of its shipper's contract.¹⁷ Moreover, Cheniere Sabine Pipeline's proposed rates may allow it to overrecover the project's estimated 20-year total cost of service because the proposed levelized rates derived for years 1 through 10 recover about 63 percent of the total cost of service calculated for the entire 20-year period. For these reasons, the Commission will require Cheniere Sabine Pipeline to modify its proposed rates.

38. Cheniere Sabine Pipeline may design its initial rates based on a levelized cost of service over the entire 20-year operational life of the project consistent with its sole firm shipper's contract. In the alternative, it may design its initial rates using conventional ratemaking practices and offer discounts to the maximum tariff rates, if necessary.

¹⁵ See, e.g., *Tractebel Calypso Pipeline, L.L.C. (Tractebel), Preliminary Determination on Non-Environmental Issues*, 103 FERC ¶ 61,106 (2003), *Order Issuing Certificates, Section 3 Authorization, and Presidential Permit*, 106 FERC ¶ 61,273 (2004); *AES Ocean Express, LLC (Ocean Express), Preliminary Determination on Non-Environmental Issues*, 103 FERC ¶ 61,030 (2003), *Order Issuing Presidential Permit and NGA Sections 3 and 7 Authorizations*, 106 FERC ¶ 61,090 (2004) (approving levelized rates consistent with the term of the shipper's contract).

¹⁶ Cheniere Sabine Pipeline proposes using 20-year straight line depreciation resulting in a 5 percent annual depreciation accrual rate, but then for each of the first 10 years of the 20-year project operations, it adjusted each of the annual depreciation accrual rates to levelize the costs of service. For the second 10 years of operations, Cheniere Sabine Pipeline proposes using the 5 percent annual straight line depreciation accrual rates.

¹⁷ Although Cheniere Sabine Pipeline anticipated initial firm contracts of only 10 years in duration, it has recently awarded all the capacity through the open season process for a period of 20 years to its affiliate, Cheniere Resources, Inc., at maximum tariff rates.

Finally, because Cheniere Sabine Pipeline has proposed negotiated rate provisions in section 30 of the General Terms and Conditions (GT&C), it may choose to offer negotiated rates to its shipper.

b. ROE and Capital Structure

39. In Exhibit L to the amended application, Cheniere Sabine Pipeline proposes a 14 percent ROE based on its form of incorporation, project risks, proposed capital structure of 50 percent debt and 50 percent equity, and anticipated capital market conditions. Cheniere Sabine Pipeline also relies on the recent 14 percent ROEs that the Commission allowed for Islander East Pipeline Company, L.L.C., Millennium Pipeline Company, LP and Cross Bay Pipeline Company, L.L.C.¹⁸ Cheniere Sabine Pipeline asserts that the risks are much greater for its ultimate parent company, Cheniere Energy, Inc. (Cheniere Energy), than for the equity owners of the abovementioned pipelines, because Cheniere Energy is a small company with a substantially leaner capitalization than that generally found for other much larger capitalized parents of Commission-regulated pipelines. Additionally, Cheniere Sabine Pipeline offers that the major source of gas receipts for the pipeline will come from a single source, the Sabine LNG terminal, which can lead to variability in the quantities of gas transported and higher uncertainty of receiving operating income. Cheniere Sabine Pipeline believes these factors and considerations support a 14 percent ROE at a 50 percent debt and 50 percent equity capital structure. The Commission approves Cheniere Sabine Pipeline's proposed capital structure, rate of return on equity and debt costs.

c. Interruptible Services Revenue Crediting

40. Cheniere Sabine Pipeline does not propose to allocate costs to the ITS and PALS interruptible services. The Commission's policy regarding new interruptible services requires either a 100 percent credit of the interruptible revenues, net of variable costs, to firm and interruptible customers or an allocation of costs and volumes to these services.¹⁹ Consistent with precedent, the Commission will require Cheniere Sabine Pipeline to allocate an appropriate level of the estimated cost of service to its interruptible services, recalculate its rates, and file documentation demonstrating its recalculation. In the alternative, Cheniere Sabine Pipeline may credit the ITS and PALS revenues to its firm

¹⁸ See Cheniere Sabine Pipeline's response to the August 12, 2004 staff information request no. 2.

¹⁹ See, e.g., *Independence Pipeline Co.*, 89 FERC ¶ 61,283 (1999); *Maritimes & Northeast Pipeline L.L.C.*, 80 FERC ¶ 61,136 at p. 61,475 (1997), *order on reh'g*, 81 FERC ¶ 61,166 at pp. 61,725-26 (1997).

and interruptible shippers. If it does so, Cheniere Sabine Pipeline must revise its tariff to provide for a mechanism to credit 100 percent of the ITS and PALS revenues, net of variable costs, to its firm and interruptible cost-based recourse rate shippers.

d. Rate Changes and Rate Review

41. The Commission will require Cheniere Sabine Pipeline to file revisions to its proposed initial rates consistent with the discussion above within 60 days of the date of issuance of this order. If it desires to make any other changes not specifically authorized by this order prior to placing its facilities into service, it will need to file an amendment to its application under NGA section 7(c). In that filing, Cheniere Sabine Pipeline will need to provide cost data and the required exhibits supporting any revised rates. After the in-service date, Cheniere Sabine Pipeline must make a NGA section 4 filing to change its rates to reflect revised construction and operating costs.

42. Consistent with Commission precedent, the Commission will require Cheniere Sabine Pipeline to file a cost and revenue study at the end of its first three years of actual operation to justify its existing cost-based firm and interruptible recourse rates.²⁰ In its filing, the projected units of service should be no lower than those upon which Cheniere Sabine Pipeline's approved initial rates are based. The filing must include a cost and revenue study in the form specified in section 154.313 of the regulations to update cost of service data. After reviewing the data, we will determine whether to exercise our authority under NGA section 5 to establish just and reasonable rates. In the alternative, in lieu of this filing, Cheniere Sabine Pipeline may make an NGA section 4 filing to propose alternative rates to be effective no later than 3 years after the in-service date for its proposed facilities.

e. Pro Forma Tariff Issues

43. Cheniere Sabine Pipeline proposes to provide open access transportation pursuant to the *pro forma* tariff. The Commission is hindered in its review of Cheniere Sabine Pipeline's *pro forma* tariff because the tariff is incomplete. There are numerous examples where Cheniere Sabine Pipeline has failed to make needed references for the Commission to fully understand how the various tariff provisions are intended to relate to

²⁰See, e.g., *Trunkline LNG Co.*, 82 FERC ¶ 61,198, at p. 61,780 (1998), *aff'd sub nom*, *Trunkline LNG Co. v. FERC*, 194 F.3d 68 (D.C. Cir. 1999); *Horizon Pipeline Co., L.L.C.*, 92 FERC ¶ 61,205, at p. 61,687 (2000); *Vector Pipeline Company*, 85 FERC ¶ 61,083 (1998).

each other.²¹ There are also references to tariff sheets that do not exist, tariff sheet references that are incorrect, circular references, as well as terms used that are not defined.

44. Some tariff provisions address certain terms and conditions of service that are located in multiple places in the tariff and may conflict with each other.²² Cheniere Sabine Pipeline attempts to remedy this situation by stating that if a conflict arises between the rate schedule(s) and its GT&C, the provisions in the rate schedule(s) shall govern.²³ This approach creates unnecessary inconsistencies and ambiguities. Cheniere Sabine Pipeline has inserted some provisions in more than once place in the GT&C.²⁴ Therefore, the Commission will require Cheniere Sabine Pipeline to revise its *pro forma* tariff to include generally applicable service provisions that apply to all rate schedules either in the GT&C or in each rate schedule, but not both. Also, the Form of Service Agreement(s) should not include general provisions already addressed in either the rate schedules or the GT&C.²⁵ Additionally, Cheniere Sabine Pipeline is required to eliminate the duplication of provisions included in the GT&C.

45. Cheniere Sabine Pipeline states without elaboration that its *pro forma* tariff follows the Commission's requirements and policies established by Order Nos. 637, *et seq.*, and complies with all of the currently applicable North American Energy Standards Board (NAESB). Therefore, when Cheniere Sabine Pipeline files its revised *pro forma* tariff, it must provide a detailed narrative explaining how the tariff conforms to the applicable provisions of Order No. 637, a chart, identifying how it complies with the NAESB Standards and Definitions, and the location of the NAESB Standards as

²¹ For example, there are over 80 instances where the *pro forma* tariff contains references to provisions that do not exist in its tariff, such as "Section 0," "Section 0.B.," "Section 0.0.2(a) (ii), b(i) and b(2)," and several other similar variations.

²² For example, requests for service provisions involving Rate Schedule ITS are located in Rate Schedule ITS, section 3 (Original Sheet Nos. 22-25), the ITS Form of Service Agreement (Original Sheet Nos. 503-506), and section 22 of the GT&C (Original Sheet No. 172).

²³ For instance, Rate Schedule FTS, section 10, Rate Schedule ITS, section 7, Rate Schedule PALS, section 6.

²⁴ For example, the segmentation provisions are located in both section 20 and 26.D. of the GT&C.

²⁵ See 18 C.F.R. § 154.110 (2004).

incorporated verbatim or by reference in Cheniere Sabine Pipeline's tariff.²⁶ Also, in Part 358 of the regulations, the Commission adopted new standards of conduct to ensure that transmission providers cannot extend their market power over transmission by giving energy affiliates unduly preferential treatment.²⁷ Cheniere Sabine Pipeline must also revise its *pro forma* tariff to comply with the standards of conduct requirements in Order No. 2004.

46. Appendix A provides Cheniere Sabine Pipeline with additional guidance with respect to its *pro forma* tariff. However, the Commission's limited guidance regarding certain tariff provisions should not be construed as approval or acceptance of any particular *pro forma* tariff provision.

47. The Commission will require Cheniere Sabine Pipeline to file a revised *pro forma* tariff within 60 days of the date of issuance of this order in accordance with these directives. In addition, Cheniere Sabine Pipeline must file a redline-strikeout version of the revised *pro forma* tariff to reflect redline-strikeout of only the changes made to the *pro forma* tariff sheets contained in the filing to comply with this Commission order. The Commission will further review Cheniere Sabine Pipeline's proposed terms and conditions of service once it files its revised *pro forma* tariff.

3. Accounting

48. Cheniere Sabine Pipeline's proposed straight-line depreciation rate of 5 percent per year based upon a 20-year life is consistent with the Commission's Uniform System of Accounts, because it is a systematic and rational depreciation method. Therefore, the Commission approves the use of a 5 percent depreciation rate for Cheniere Sabine Pipeline.

²⁶ *Standards for Business Practices of Interstate Natural Gas Pipelines*, Order No. 587-R, 102 FERC ¶ 61,273 (2003), which amends the Commission's regulations to incorporate by reference the most recent version of the standards, Version 1.6, promulgated July 31, 2002, by the Wholesale Gas Quadrant (WCQ) of the North American Energy Standards Board (NAESB) and WCQ standards governing partial day results.

²⁷ *Standards of Conduct for Transmission Providers*, Order No. 2004, 68 Fed. Reg. 69,134 (December 11, 2003), III FERC Stats. & Regs. ¶ 31,155 (2003), *order on reh'g*, Order No. 2004-A, 69 Fed. Reg. 23,562 (April 29, 2004), III Stats. & Regs. ¶ 31,161 (2004).

49. As noted above, Cheniere Sabine Pipeline may implement a levelized cost of service rate over the entire operational life of the project, if it so chooses. In Exhibit P to the amended application, Cheniere Sabine Pipeline suggests that it would implement a levelized rate plan by recognizing regulatory assets but does not provide the specific accounts that would be used. Therefore, we will clarify that regulatory assets related to a rate levelization plan shall be recorded by debiting Account 182.3, Other Regulatory Assets, and crediting Account 407.4, Regulatory Credits. Any regulatory liabilities shall be recorded by crediting Account 254, Other Regulatory Liabilities, and debiting Account 407.3, Regulatory Debits.

50. An allowance for funds used during construction (AFUDC) is a component part of the cost of constructing Cheniere Sabine Pipeline's facilities. Gas Plant Instruction 3(17)²⁸ prescribes a formula for determining the maximum amount of AFUDC that may be capitalized as a component of construction cost. That formula, however, uses prior year book balances and cost rates of borrowed funds and other capital. In cases of newly created entities, such as Cheniere Sabine Pipeline, prior year book balances do not exist; therefore, using the formula contained in Gas Plant Instruction 3(17) could produce inappropriate amounts of AFUDC.

51. Therefore, to ensure that appropriate amounts of AFUDC are capitalized in this project we will require Cheniere Sabine Pipeline to capitalize the actual cost of borrowed and other funds and for construction purposes not to exceed the amount of debt and equity AFUDC that would be capitalized based on the overall rate of return approved herein. This is consistent with what we have required in other similar cases.²⁹

4. Environmental

52. Our staff prepared a final Environmental Impact Statement (EIS) for the Sabine LNG and Cheniere Sabine Pipeline projects³⁰ (the projects will be referred to collectively as Cheniere Sabine). On November 19, 2004, the Environmental Protection Agency published a Notice of Availability of the final EIS in the *Federal Register*. Approximately 250 copies of the final EIS were mailed to agencies, groups, and individuals on the mailing list.

²⁸18 C.F.R. Part 201 (2004).

²⁹ See, e.g., *Gulfstream Natural Gas System, L.L.C.*, 91 FERC ¶ 61,119 (2000); and *Buccaneer Gas Pipeline Company L.L.C.*, 91 FERC ¶ 61,117 (2000).

³⁰ The final EIS was issued on November 12, 2004.

53. The final EIS addresses the project's purpose and need, alternatives, geology, soils and sediments, water resources, wetlands and vegetation, wildlife and aquatic resources, essential fish habitat and threatened and endangered species, land use, socioeconomics, cultural resources, air quality and noise, safety, and cumulative impacts. The U.S. Fish and Wildlife Service (FWS), the U.S. Coast Guard, and the U.S. Army Corps of Engineers (COE) were cooperating agencies in the preparation of the final EIS. The National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) and the Louisiana Department of Wildlife and Fisheries (LADWF) have also assisted in the preparation of this EIS.

54. The final EIS addressed the comments from 22 individuals, organizations, companies, and local authorities who attended the public meeting held on September 21, 2004, in Johnsons Bayou, Louisiana. The final EIS also addresses letters filed by seven federal agencies, a member of Congress, two offices in one state agency, the applicant, and five individuals or organizations in response to the draft EIS.³¹ The commentors' primary concerns related to live-oak habitats, dredge material disposal, dredge sediment testing, wetland impacts, impacts on a neighboring property owner, cumulative impacts, and alternatives.

55. Additional comments were made by NOAA Fisheries staff concerning impacts to the Kemp's ridley sea turtle. NOAA Fisheries indicated that dredge material disposal at Louisiana Point may potentially impact juvenile Kemp's ridley sea turtles if spoil disposal activities were to occur in the summer months. Because of this additional information, further consultation between Cheniere Sabine and NOAA Fisheries will be required prior to construction of the project. In response, we have added an additional condition stating that no construction activities may occur until consultation with NOAA Fisheries has been completed.

56. W&T Offshore, LLC (W&T), a property owner on the west side of the LNG terminal site and marine basin, filed comments on the draft EIS asserting that the Sabine LNG project will totally surround its property making it difficult for W&T to continue to use its property as it currently does. W&T states, among other things, that the Sabine LNG project would have detrimental impacts on wildlife, has the potential to cause erosion, and would limit access to the property thereby reducing property value. W&T's property contains no residential, commercial or industrial activities, but is used for wildlife and recreational purposes such as hunting. W&T argues that its property should be incorporated into the lease for the LNG terminal to avoid devaluation of the property.

³¹ The draft EIS was issued on August 18, 2004.

57. With construction and operation of the LNG terminal on the adjacent lands, wildlife patterns on the W&T property would change, but wildlife would be expected to adapt to the terminal once the construction areas at the LNG site are revegetated and wildlife becomes accustomed to facility operations. In response to W&T's comments on erosion at the property, we conclude that it is unlikely that the LNG ships or tugs would generate wakes significantly different from those that are currently generated by existing ship traffic along the Sabine-Neches Waterway. Concerning landowner access, the existing access road from the state highway to the W&T property would be removed by the facility's firepond. Cheniere Sabine and W&T have been unable to reach agreement for this property. However, in compliance with state law, Cheniere Sabine would develop a reasonable route to provide W&T access to its property. As specified in Appendix H of the final EIS, the appropriate sections of the final EIS have been revised to further address all of W&T's comments.

58. We have reviewed the information and analysis contained in the final EIS regarding the potential environmental effect of the project. Based on our consideration of this information, we agree with the conclusions presented in the final EIS and find that Cheniere Sabine's project is environmentally acceptable, if the project is constructed and operated in accordance with the recommended environmental mitigation measures in Appendix B to this order. Thus, we are including the environmental mitigation measures recommended in the final EIS as conditions to the authorizations issued to Cheniere Sabine in this order.

59. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. We encourage cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.³²

60. Cheniere Sabine shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Cheniere Sabine. Cheniere Sabine shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

³²See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P., et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

IV. Conclusion

61. For the reasons set forth herein, and subject to the conditions set forth below, we find that Sabine LNG's import terminal is in the public interest under section 3. We further find, also subject to the conditions below, that Cheniere Sabine Pipeline's project is required by the public convenience and necessity under section 7(c). Thus, we grant the requested authorizations to Sabine LNG and Cheniere Sabine Pipeline.

62. At a hearing held on December 15, 2004, the Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application and exhibits thereto, submitted in support of the authorizations sought herein, and upon consideration of the record,

The Commission orders:

(A) In Docket No. CP04-47-000, Sabine LNG is hereby authorized under section 3 of the NGA to site, construct, and operate its LNG terminal in Cameron Parish, Louisiana, as more fully described in this order and in the application.

(B) In Docket Nos. CP04-38-000 and CP04-38-001, a certificate of public convenience and necessity is issued to Cheniere Sabine Pipeline under section 7(c) of the NGA authorizing it to construct and operate a 16-mile long, 42-inch diameter pipeline, as more fully described in the order and in the application.

(C) In Docket No. CP04-40-000, a blanket transportation certificate is issued the Cheniere Sabine Pipeline under Subpart G of Part 284.

(D) In Docket No. CP04-39-000, a blanket construction certificate is issued to Cheniere Sabine Pipeline under Subpart F of Part 157.

(E) Cheniere Sabine Pipeline must file revised *pro forma* tariff sheets and revise its rates consistent with the discussion in the body of this order, within 60 days after the date of this order.

(F) Within three years after its in-service date, as discussed herein, Cheniere Sabine Pipeline must make a filing to justify its existing rates or propose alternative rates.

(G) Sabine LNG and Cheniere Sabine Pipeline shall comply with the environmental conditions contained in Appendix B to this order.

(H) Sabine LNG and Cheniere Sabine Pipeline shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies either Sabine LNG or Cheniere Sabine Pipeline. Sabine LNG or Cheniere Sabine Pipeline shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

(I) The untimely motions to intervene of Sempra Energy LNG, Statoil ASA and Statoil Natural Gas LLC and Florida Gas Transmission Company are granted.

(J) W&T's protest is denied.

By the Commission.

(S E A L)

Linda Mitry,
Deputy Secretary.

Appendix A

Cheniere Sabine Pass Pipeline Company

FERC Gas Tariff Pro Forma Original Volume No. 1

Statement of Rates

First Revised Sheet No. 5

Cheniere Sabine Pipeline does not state the Rate Schedule FTS authorized overrun rate on the tariff sheet, however, Cheniere Sabine Pipeline has designed an authorized overrun rate of \$0.195 per MMBtu on Exhibit P, page 11 of its Amended Application. Cheniere Sabine Pipeline must state the Rate Schedule FTS authorized overrun rate on the tariff sheet.

Rate Schedule FTS

Original Sheet No. 10

In the third paragraph of section 2, Cheniere Sabine Pipeline states that the origin of Transporter's facilities will constitute its initial primary receipt point and FTS service for vaporized LNG at this receipt point will have a higher priority than for any other transportation service on Transporter's pipeline to ensure that the vaporized LNG can be taken away from the LNG terminal. Cheniere Sabine Pipeline must explain and support this language, including explaining if it is intended to convey a higher priority for some FTS service over other FTS service. Moreover, Cheniere Sabine Pipeline's use of the term "initial primary receipt point" is not defined in the General Terms and Conditions, but should be.

Original Sheet Nos. 12-14

Section 3.A.9. refers to Transporter's Point of Interest (POI) number. Cheniere Sabine Pipeline must define the term.

Section 3.A.11. states that to the extent Shipper is a proposed LNG terminal who is providing service for facilitation of revaporized LNG delivered, Shipper shall provide adequate detail of Shipper's proposed LNG terminal including terminal design specifications, in-service date and intended supply sources. Cheniere Sabine Pipeline

must provide an explanation why this information is necessary, and under what circumstances it can have a shipper that is a proposed LNG terminal, and why this provision is relevant to Cheniere Sabine Pipeline.

The reference to p. 503 in the second paragraph of section 3.A. should be to Original Sheet No. 503.

Original Sheet Nos. 14-15

Section 4 refers to Sheet No. 554 which is an incorrect reference to the FTS rates.

Sections 4.A.1.(b) and (c) provide for charges to be multiplied by quantities actually delivered, but section 4.A.1.(d) provides for retaining gas at receipt points (Original Sheet No. 15). Section 4.A.1. is inconsistent with the second paragraph of section 2 (Original Sheet No. 10). Cheniere Sabine Pipeline has calculated its cost-based rates using receipts into its pipeline system (and not deliveries), and Cheniere Sabine Pipeline should conform its tariff language accordingly.

Cheniere Sabine Pipeline must include language in section 4.B. stating that incidental charges must be subject to prior Commission approval. (Original Sheet No. 15)

Original Sheet Nos. 16-17

The section 7 definitions of Primary and Secondary Receipt Points (Original Sheet No. 16) and section 8 definitions of Primary and Secondary Delivery Points (Original Sheet No. 17) duplicate the Definitions in section 1 of the General Terms and Conditions. These definitions should be located in one place in the tariff.

The first paragraph of section 7.B. provides for changing the master receipt point listing on Cheniere Sabine Pipeline's electronic bulletin board, but not in Appendix A to the General Terms and Conditions of its tariff (Original Sheet No. 16). Cheniere Sabine Pipeline must explain why this approach is appropriate.

Cheniere Sabine Pipeline refers to the electronic bulletin board (Original Sheet No. 16), electronic communications of non-transactional data website (Original Sheet No. 115) and transactional electronic communications mechanism (Original Sheet Nos. 166-167). Cheniere Sabine Pipeline should explain the difference between the terms (if there are differences), and put the definition(s) in one place in the tariff.

Original Sheet No. 18

Cheniere Sabine Pipeline should eliminate the second sentence in section 10, which states that if a conflict arises between the rate schedule(s) and General Terms and Conditions, the provisions in the rate schedule(s) shall govern.

Rate Schedule ITS

Original Sheet Nos. 22-25

Section 3.A.11. states that to the extent Shipper is a proposed LNG terminal who is providing service for facilitation of revaporized LNG delivered, Shipper shall provide adequate detail of Shipper's proposed LNG terminal including terminal design specifications, in-service date and intended supply sources. Cheniere Sabine Pipeline must provide an explanation why this information is necessary, and under what circumstances that it can have a shipper that is a proposed LNG terminal, and why this provision is relevant.

The reference to p. 500 in the third paragraph of section 3.A. (Original Sheet No. 23) should be to Original Sheet No. 500.

Original Sheet No. 25

Section 4 refers to Sheet Nos. 4 and 554, which are incorrect references to the ITS rate.

Section 4.A.1. refers to the quantity of gas scheduled for delivery. This language is inconsistent with similar language in section 4 of Rate Schedule FTS. In this regard, Cheniere Sabine Pipeline should conform its tariff language to be consistent in each of its rate schedules.

Cheniere Sabine Pipeline must include language in section 4.B. stating that incidental charges must be subject to prior Commission approval. (Original Sheet No. 15)

Original Sheet No. 26

For section 6, see discussion for Original Sheet No. 17. For section 7, see discussion for Original Sheet No. 18.

Rate Schedule PALS

Original Sheet No. 27

In addition to section 2.B. being inconsistent with the notice of termination in the PALS Form of Service Agreement, Cheniere Sabine Pipeline should explain why the minimum period for parked or loaned gas should not be, for example, one hour up to 30 days, in lieu of the proposed one day period up to one calendar month.

Original Sheet Nos. 28-29

Section 3.A. refers to Sheet No. 4, which is an incorrect reference to the PALS rate.

Regarding section 3.D., Cheniere Sabine Pipeline should explain how PALS works in conjunction with other transportation rate schedules, and particularly why retainage should be applicable to PALS service.

Original Sheet No. 29

Section 5 discusses a Critical Period Notice, but does not define the term or reference any applicable provision in the General Terms and Conditions of the *pro forma* tariff.

For section 6, see discussion for Original Sheet No. 18 above.

General Terms and Conditions

Original Sheet Nos. 104-106

In section 2.C., Cheniere Sabine Pipeline refers to utilizing gas from standby equipment to effectuate deliveries. Cheniere Sabine Pipeline should provide an explanation of what standby equipment it is referring to and the capabilities of such equipment (Original Sheet No. 106).

Cheniere Sabine Pipeline should identify the maximum allowable operating pressure in section 3.0. (Original Sheet No. 106).

Original Sheet Nos. 131-136

Cheniere Sabine Pipeline has not identified what Spot Index Prices it proposes to use in Section 12. In section 14, Cheniere Sabine Pipeline has not defined non-critical periods and critical periods.

Original Sheet No. 141

Section 16.H. contains discussion stating the types of discounts that Cheniere Sabine Pipeline may agree to in addition to the basic discount from the stated maximum rates. Cheniere Sabine Pipeline should include provisions about discounting in one place, such as in section 27 of the General Terms and Conditions (Original Sheet Nos. 185-186).

Original Sheet Nos. 145-167

The outline numbering and lettering for section 18 contains several errors.

Cheniere Sabine Pipeline must explain whether a Curtailment Order (Original Sheet No. 145) is intended to be different from an Operational Flow Order (Original Sheet No. 149), and, if not, only one of the terms should be used in the tariff.

Cheniere Sabine Pipeline must explain why the order of suspension of service in section 18.A.3.b. provides for suspending Rate Schedule FTS firm service prior to suspending Rate Schedule PALS interruptible service, and also why PALS service is suspended after Rate Schedule ITS and Rate Schedule FTS (Original Sheet No. 147).

Original Sheet No. 157 is inexplicably blank.

Original Sheet No. 166

Section 12 appears to be an incorrect reference.

Original Sheet Nos. 172-175

Cheniere Sabine Pipeline must explain how the procedures to obtain firm capacity at a new location within Shipper's MDTQ contained in section 22.C. of the General Terms and Conditions relate to the segmentation provisions of section 20 of the General Terms and Conditions. Cheniere Sabine Pipeline must also explain how section 20 relates to provisions for contracting for unsubscribed capacity set forth in section 25 of the General Terms and Conditions (Original Sheet Nos. 178-182), and also those requirements set forth on section 3 of Rate Schedule FTS. Cheniere Sabine Pipeline must place its procedures for obtaining capacity in one place in the tariff.

In addition, section 22.D. discusses the construction of new facilities, which is inconsistent with the overall intent of section 22 which addresses service on existing mainline facilities. Language referring to the construction of facilities should be a separate provision of the General Terms and Conditions.

Original Sheet Nos. 178-182

Original Sheet No. 181 contains in section 25.F. certain right of first refusal language. Cheniere Sabine Pipeline has also included the right of first refusal in section 21 of the General Terms and Conditions. Cheniere Sabine Pipeline must include the right of first refusal language in one place in the tariff.

Original Sheet Nos. 183-184

Section 26 relates to flexible primary and secondary receipt and delivery points. Cheniere Sabine Pipeline must explain how this flexible primary points work in conjunction with its initial primary receipt point proposal (section 2 of Rate Schedule FTS in Original Sheet No. 10).

Section 26.D. relates to segmentation authority. Cheniere Sabine Pipeline also address segmentation in section 20 of the General Terms and Conditions. Cheniere Sabine Pipeline must place segmentation language in one place in the General Terms and Conditions.

Original Sheet Nos. 185-186

Cheniere Sabine Pipeline must indicate whether it intends to use price indices in determining discounted rates, and if so, explain how any such indices are consistent with Commission policy, and provide *pro forma tariff* language for the use of price indices.³³

Form(s) of Service Agreement

FTS (Original Sheet Nos. 400-411)

The definitions incorporated into Article I should be the definitions included in either the General Terms and Conditions, or Rate Schedule FTS (Original Sheet No. 400).

For Article IX, see the discussion for Original Sheet No. 15 above.

Cheniere Sabine Pipeline must identify the Other Provisions that constitute Article XI (Original Sheet No. 407).

³³ Southern Natural Gas Co., 108 FERC ¶ 61,326 at P 52 (2004).

Article XII contains assignment provisions that are inconsistent with those included in the Form(s) of Service Agreement for the other rate schedules (Original Sheet No. 407).

Cheniere Sabine Pipeline must explain how Article XII, 12.4, which states the agreement is governed by and interpreted in accordance with the laws of State of Texas (Original Sheet No. 407), is consistent with section 28 of the General Terms and Conditions (Original Sheet No. 186). It should also explain why there is no such provision included in the ITS Form of Service Agreement, and finally, why the PALS Form of Service Agreement interpretation and performance is by the laws of the State of Nevada (Original Sheet No. 510), and Capacity Release Form Agreement applicability is interpreted under the laws of the State of Texas (Original Sheet No. 542).

ITS (Original Sheet Nos. 500-506)

Original Sheet No. 500 includes a For Internal Use Only heading not included in the Form(s) of Service Agreement for other rate schedules.

The outline and numbering used for the ITS Form of Service Agreement does not use Articles consistent with those used for the FTS and PALS Form(s) of Service Agreement.

Section 4 does not provide Cheniere Sabine Pipeline the ability to use negotiated rate authority (Original Sheet No. 501).

Cheniere Sabine Pipeline must identify the Other Provisions that constitute section 8 (Original Sheet No. 502).

Cheniere Sabine Pipeline must explain and identify the Additional Terms and Conditions that it contemplates for section 9 (Original Sheet No. 502).

Original Sheet Nos. 503-506 contain a Request For Service Form (not included in the Form(s) of Service Agreement for FTS and PALS), that should be included in one place in the tariff.

PALS (Original Sheet Nos. 506-511)

Article II contains a notice of termination provision of one year or more that does not appear appropriate for PALS (Original Sheet No. 507).

Article III, section 3.1 does not provide Cheniere Sabine Pipeline the ability to use negotiated rate authority (Original Sheet No. 508).

Article V provides for interpretation and performance of the Agreement under the laws of the State of Nevada (Original Sheet No. 510). As previously discussed, this is inconsistent with other similar provisions in the *pro forma* tariff.

Article VIII is not consistent with the assignment provisions included in the Form(s) of Service Agreement for other Rate Schedules (Original Sheet No. 510).

Capacity Release Agreement Form (Original Sheet No. 540-554)

Section B (Original Sheet No. 542) is incorrectly numbered. Also, see discussion of governing law in Original Sheet Nos. 400-411 above.

Appendix B

Environmental Conditions for the Sabine Pass LNG Project and Cheniere Sabine Pass Pipeline Company

1. Sabine Pass LNG, L.P. and Cheniere Sabine Pass Pipeline Company (collectively referred to as Cheniere Sabine) shall follow the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff data requests), and as identified in the EIS, unless modified by this Order. Cheniere Sabine must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) **before using that modification.**
2. The Director of OEP has delegated authority to take all steps necessary to ensure the protection of life, health, property and the environment during construction and operation of the project. This authority shall include:
 - a. stop-work authority and authority to cease operation; and the design and implementation of any additional measures deemed necessary to assure continued compliance with the intent of the conditions of this Order.
2. **Prior to any construction**, Cheniere Sabine shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors (EIs), and contractor personnel will be informed of the EI's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs **before** becoming involved with construction and restoration activities.
3. The authorized facility locations shall be as shown in the EIS, as supplemented by filed alignment sheets, and shall include the staff's recommended facility locations. **As soon as they are available, and before the start of construction,**

Cheniere Sabine shall file with the Secretary revised detailed survey alignment maps/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by this Order. All requests for modifications of environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment maps/sheets.

Cheniere Sabine's exercise of eminent domain authority granted under the NGA section 7(h) in any condemnation proceedings related to the Order for the pipeline must be consistent with these authorized facilities and locations. Cheniere Sabine's right of eminent domain granted under NGA section 7(h) does not authorize it to increase the size of its natural gas pipeline to accommodate future needs or to acquire a right-of-way for a pipeline to transport a commodity other than natural gas.

4. Cheniere Sabine shall file with the Secretary detailed alignment maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that will be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction** in or near that area.

This requirement does not apply to extra workspace allowed by the *Upland Erosion Control, Revegetation, and Maintenance Plan* or minor field realignments per landowner needs and requirements that do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
- b. implementation of endangered, threatened, or special concern species mitigation measures;

- c. recommendations by state regulatory authorities; and
 - d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
5. **Within 60 days of acceptance of the Certificate and before construction begins**, Cheniere Sabine shall file an initial Implementation Plan with the Secretary for the review and written approval by the Director of OEP describing how Cheniere Sabine will implement the mitigation measures required by this Order. Cheniere Sabine must file revisions to the plan as schedules change. The plan shall identify:
- a. how Cheniere Sabine will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
 - b. the number of EIs assigned per spread, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
 - c. company personnel, including EIs and contractors, who will receive copies of the appropriate material;
 - d. what training and instructions Cheniere Sabine will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);
 - e. the company personnel (if known) and specific portion of Cheniere Sabine's organization having responsibility for compliance;
 - f. the procedures (including use of contract penalties) Cheniere Sabine will follow if noncompliance occurs; and
 - g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
 - (1) the completion of all required surveys and reports;
 - (2) the mitigation training of onsite personnel;

- (3) the start of construction; and
 - (4) the start and completion of restoration.
- 6. Cheniere Sabine shall develop and implement an environmental complaint resolution procedure. The procedure shall provide landowners with clear and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the Project and restoration of the right-of-way. **Prior to construction**, Cheniere Sabine shall mail the complaint procedures to each landowner whose property would be crossed by the Project.
 - a. In its letter to affected landowners, Cheniere Sabine shall:
 - (1) provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
 - (2) instruct the landowners that, if they are not satisfied with the response, they should call Cheniere Sabine's Hotline; the letter should indicate how soon to expect a response; and
 - (3) instruct the landowners that, if they are still not satisfied with the response from Cheniere Sabine's Hotline, they should contact the Commission's Enforcement Hotline at (888) 889-8030.
 - b. In addition, Cheniere Sabine shall include in its weekly status report a copy of a table that contains the following information for each problem/concern:
 - (1) the date of the call;
 - (2) the identification number from the certificated alignment sheets of the affected property;
 - (3) the description of the problem/concern; and
 - (4) an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.

7. Cheniere Sabine shall employ a team of EIs (at least two per construction spread) with one available at the LNG terminal as appropriate during site preparation. The EI(s) shall be:
 - a. responsible for monitoring and ensuring compliance with all mitigation measures required by this Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 6 above) and any other authorizing document;
 - c. empowered to order correction of acts that violate the environmental conditions of this Order, and any other authorizing document;
 - d. a full-time position, separate from all other activity inspectors;
 - e. responsible for documenting compliance with the environmental conditions of this Order, as well as any environmental conditions/permit requirements imposed by other Federal, state, or local agencies; and
 - f. responsible for maintaining status reports.
8. Cheniere Sabine shall file updated status reports prepared by the EI with the Secretary on a weekly basis until all construction and restoration activities are complete. On request, these status reports will also be provided to other Federal and state agencies with permitting responsibilities. Status reports shall include:
 - a. the current construction status of the Project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - b. a listing of all problems encountered and each instance of noncompliance observed by the EI(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other Federal, state, or local agencies);
 - c. corrective actions implemented in response to all instances of noncompliance, and their cost;
 - d. the effectiveness of all corrective actions implemented;

- e. a description of any landowner/resident complaints which may relate to compliance with the requirements of this Order, and the measures taken to satisfy their concerns; and
 - f. copies of any correspondence received by Cheniere Sabine from other federal, state or local permitting agencies concerning instances of noncompliance, and Cheniere Sabine's response.
- 9. Cheniere Sabine must receive written authorization from the Director of OEP **before commencing service** of the Project. Such authorization will only be granted following a determination that the LNG facility has been constructed in accordance with Commission approval and applicable standards, can be expected to operate safely as designed, and that rehabilitation and restoration of the right-of-way is proceeding satisfactorily.
- 10. **Within 30 days of placing the authorized facilities in service**, Cheniere Sabine shall file an affirmative statement with the Secretary, certified by a senior company official:
 - a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the certificate conditions Cheniere Sabine has complied with or will comply with. This statement shall also identify any areas along the right-of-way where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
- 11. Cheniere Sabine shall eliminate the extra work spaces in wetlands at MPs 14.9, 15.2, 15.3, 15.9, and 16.0 from its proposed construction work areas. If these extra work spaces would be required for constructability reasons, Cheniere Sabine shall file with the Secretary for review and written approval by the Director of OEP a site-specific construction plan before use of that extra work area. The site-specific plan should clearly provide justification for the need for the extra work space.
- 12. Cheniere Sabine shall limit its construction right-of-way to 100 feet between MPs 2.1 and 7.1 and any other location where a push-pull construction technique would be used. If additional right-of-way is required, Cheniere Sabine shall file with the

Secretary for review and written approval by the Director of OEP a site-specific construction plan and written justification before use of any additional right-of-way width.

13. **Prior to construction**, Cheniere Sabine shall file with the Secretary **for review and written approval by the Director of OEP** a copy of the section 404/10 permit issued by the U.S. Army Corps of Engineers (COE), and the finalized Aquatic Resources Mitigation Plan developed in consultation with the COE, National Marine Fisheries Service (NOAA Fisheries), U.S. Fish and Wildlife Service (FWS), Louisiana Department of Natural Resources (LADNR), and Louisiana Department of Wildlife and Fisheries (LADWF).
14. **Prior to construction** of the pipeline, Cheniere Sabine shall file with the Secretary the results of the survey for coastal live oak-hackberry forest between MPs 15.4 and 15.7. If this community is present, Cheniere Sabine shall file a copy of the mitigation plan developed in consultation with the LADWF and include the LADWF comments on the plan.
15. Cheniere Sabine shall consult with NOAA Fisheries and address its concerns regarding monitoring of wetlands along the pipeline for a period of no less than 3 years, and in the development of appropriate mitigation ratios (and timing for development of mitigation areas) for Essential Fish Habitat (EFH) impacts at the LNG terminal site and for long-term (over 3 years) impacts to tidally influenced wetlands along the pipeline. Documentation of these consultations shall be filed with the Secretary **before construction** of any facilities.
16. If the LNG terminal or pipeline facilities have not begun construction within 1 year from the date of FERC approval of the Project, Cheniere Sabine shall consult with the appropriate offices of the FWS and NOAA Fisheries to update the species list and to determine if additional surveys are required. Survey reports, FWS or NOAA Fisheries comments on the survey and its conclusions, shall be filed with the Secretary **prior to construction**.
17. Before the start of construction of the pipeline, Cheniere Sabine shall conduct a review of the NOAA National Geodetic Survey database to identify geodetic control monuments that may be affected by pipeline construction. The results of this review, and documentation of consultation with NOAA National Geodetic Survey regarding any required relocations, shall be filed with the Secretary **before construction**.

18. Cheniere Sabine shall not **begin construction** of any facilities associated with the Sabine Pass LNG and Pipeline Project until it files a copy of the Coastal Zone Management Program (CZMP) consistency determination issued by the LADNR with the Secretary.
19. Cheniere Sabine shall defer implementation of any treatment plans/measures (including archaeological data recovery); construction; and use of all staging, storage, and temporary work areas and new or to-be-improved access roads **until**:
 - a. Cheniere Sabine files with the Secretary cultural resources survey reports and any required treatment plans and the Louisiana State Historic Preservation Officer's (SHPO's) comments; and
 - b. The Director of OEP reviews all cultural resources survey reports and plans and notifies Cheniere Sabine in writing that treatment plans/measures may be implemented or that construction may proceed.

All material filed with the Commission containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: **"CONTAINS PRIVILEGED INFORMATION—DO NOT RELEASE."**

20. Cheniere Sabine shall limit pile driving activities to daytime, weekday hours only. Should weekend and/or 24 hour pile driving be required to meet the construction schedule, Cheniere Sabine shall conduct a noise survey at the Sabine Pass Battleground State Park to establish actual noise levels during pile driving activities. If the actual noise levels during pile driving activities exceed ambient nighttime noise levels, then Cheniere Sabine must develop a noise mitigation plan to reduce noise levels during the weekend and/or nighttime period and document that the noise mitigation plan effectively reduces noise from construction pile driving activities. The noise survey, noise mitigation plan, and documentation shall be filed with the Secretary, for review and written approval by the Director of OEP, prior to the initiation of any weekend or nighttime pile driving activities.
21. Cheniere Sabine shall file a noise survey with the Secretary no later than 60 days after placing the LNG terminal into service. If the noise attributable to the operation of the LNG terminal exceeds a day-night sound level (L_{dn}) of 55 decibels on the A-weighted scale (dBA) at any nearby noise sensitive area NSA, Cheniere Sabine must file a report on what changes are needed and shall install additional noise controls to meet that level within 1 year of the in-service date. Cheniere Sabine shall confirm compliance with this requirement by filing a second

noise survey with the Secretary no later than 60 days after it installs the additional noise controls.

22. Cheniere Sabine shall provide a technical review of its facility design that:
- a. Identifies all combustion/ventilation air intake equipment and the distance(s) to any possible hydrocarbon release (LNG, flammable refrigerants, flammable liquids, and flammable gases); and
 - b. Demonstrates that these areas are adequately covered by hazard detection devices and indicates how these devices would isolate or shutdown any combustion equipment whose continued operation could add to or sustain an emergency.

Cheniere Sabine shall file this review with the Secretary for review and written approval by the Director of OEP **prior to construction.**

23. Cheniere Sabine shall file a copy of the contingency plan for outer containment failure with the Secretary **prior to commissioning.**
24. Cheniere Sabine shall file a copy of the criteria for horizontal and rotational movement of the inner vessel for use during and after cool down with the Secretary **before construction.**
25. In the event the temperature of any region of any storage tank outer containment vessel becomes less than the minimum specified operating temperature for the material, Cheniere Sabine shall notify the FERC on a timely basis and shall specify procedures for corrective action.
26. Cheniere Sabine shall file final drawings and specifications of the spill protection system to be applied to the LNG tank roofs with the Secretary **before construction.**
27. Cheniere Sabine shall file final drawings of the storage tank piping support structure with the Secretary **before construction.**
28. Cheniere Sabine shall file differential tank tilt settlement limits and differential movement limits between LNG tank and piping, and procedures to be implemented in the event that limits are exceeded with the Secretary **before construction.**

29. Cheniere Sabine shall file a complete list of the type, number and location of all hazard detection equipment with the Secretary **before construction**.
30. Cheniere Sabine shall equip flammable gas and UV/IR hazard detectors with local instrument status indication as an additional safety feature.
31. Cheniere Sabine shall install all hazard detectors with redundancy and fault detection and fault alarm monitoring in all potentially hazardous areas and enclosures.
32. Cheniere Sabine shall file a copy of the fire protection evaluation carried out in accordance with the requirements of NFPA 59A, chapter 9.1.2, with the Secretary **before construction**.
33. Cheniere Sabine shall file a complete list of the type, number and location of all hazard control equipment with the Secretary **before construction**.
34. Cheniere Sabine shall file a copy of the facility security plan with the Secretary **before commissioning**.
35. Cheniere Sabine shall file security personnel requirements for prior to and during LNG carrier unloading with the Secretary **before commissioning**.
36. Cheniere Sabine shall develop procedures for offsite contractors' responsibilities, restrictions, limitations and supervision of these contractors by Cheniere Sabine staff **before construction**.
37. Cheniere Sabine shall file Operation and Maintenance procedures and manuals, as well as emergency plans and safety procedure manuals, with the Secretary **before commissioning** operations. In addition, copies of the Security Manual, Transit Operations Manual, and the Emergency Response Manual prepared for the U.S. Coast Guard shall be filed with the Secretary.
38. Cheniere Sabine shall notify the FERC staff of any proposed revisions to the security plan and physical security of the facility **before commissioning** the proposed facilities.
39. Cheniere Sabine shall file monthly progress reports on the proposed construction project with the Secretary. Details should include a summary of activities, problems encountered and remedial actions taken. Problems of significant magnitude shall be reported to the FERC on a timely basis. Additional site

inspections and technical reviews will be held by FERC staff prior to commencement of operation.

40. The facility shall be subject to regular FERC staff technical reviews and site inspections on at least a biennial basis or more frequently as circumstances indicate. Prior to each FERC staff technical review and site inspection, Cheniere Sabine shall respond to a specific data request including information relating to possible design and operating conditions that may have been imposed by other agencies or organizations. Cheniere Sabine shall provide up-to-date detailed piping and instrumentation diagrams reflecting facility modifications and provision of other pertinent information not included in the semi-annual reports described below, including facility events that have taken place since the previously submitted annual report.
41. Cheniere Sabine shall file semi-annual operational reports with the Commission to identify changes in facility design and operating conditions, abnormal operating experiences, activities (including ship arrivals, quantity and composition of imported LNG, vaporization quantities, boil-off/flash gas, etc.), plant modifications including future plans and progress thereof. Abnormalities should include, but not be limited to: unloading/shipping problems, potential hazardous conditions from offsite vessels, storage tank stratification or rollover, geysering, storage tank pressure excursions, cold spots on the storage tanks, storage tank vibrations and/or vibrations in associated cryogenic piping, storage tank settlement, significant equipment or instrumentation malfunctions or failures, non-scheduled maintenance or repair (and reasons therefore), relative movement of storage tank inner vessels, vapor or liquid releases, fires involving natural gas and/or from other sources, negative pressure (vacuum) within a storage tank and higher than predicted boiloff rates. Adverse weather conditions and the effect on the facility also shall be reported. Reports shall be submitted within 45 days after each period ending June 30 and December 31.
42. Cheniere Sabine shall include a section entitled "Significant plant modifications proposed for the next 12 months (dates)" in the semi-annual operational reports. Such information will provide the FERC staff with early notice of anticipated future construction/maintenance projects at the LNG facility.
43. Cheniere Sabine shall report significant non-scheduled events, including safety-related incidents (*i.e.*, LNG or natural gas releases, fires, explosions, mechanical failures, unusual over pressurization, and major injuries) to FERC staff within 48 hours. In the event an abnormality is of significant magnitude to threaten public or employee safety, cause significant property damage, or interrupt service,

notification shall be made immediately, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency procedure. This notification practice shall be incorporated into the LNG facility's emergency plan. Examples of reportable LNG-related incidents include:

- a. fire;
- b. explosion;
- c. property damage exceeding \$10,000;
- d. death or injury requiring hospitalization;
- e. free flow of LNG for five minutes or more that results in pooling;
- f. unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability, structural integrity, or reliability of an LNG facility that contains, control, or processes gas or LNG;
- g. any crack or other material defect that impairs the structural integrity or reliability of an LNG facility that contains, controls, or processes gas or LNG;
- h. any malfunction or operating error that causes the pressure of a pipeline or LNG facility that contains or processes gas or LNG to rise above its maximum allowable operating pressure (or working pressure for LNG facilities) plus the build-up allowed for operation of pressure limiting or control devices;
- i. a leak in an LNG facility that contains or processes gas or LNG that constitutes an emergency;
- j. inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank;
- k. any safety-related condition that could lead to an imminent hazard and cause (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20 percent reduction in operating pressure or shutdown of operation of a pipeline or an LNG facility that contains or processes gas or LNG;

- l. safety-related incidents to LNG trucks or LNG vessels occurring at or in route to and from the LNG facility; or
- m. the judgment of the LNG personnel and/or management even though it did not meet the above criteria or the guidelines set forth in an LNG facility's incident management plan.

In the event of an incident, the Director of OEP has delegated authority to take whatever steps are necessary to ensure operational reliability and to protect human life, health, property or the environment, including authority to direct the LNG facility to cease operations. Following the initial company notification, FERC staff will determine the need for a separate follow-up report or follow-up in the upcoming semi-annual operational report. All company follow-up reports shall include investigation results and recommendations to minimize a reoccurrence of the incident.

- 44. **Prior to construction**, Cheniere Sabine shall file with the Secretary for review and written approval by the Director of OEP evidence that each LNG storage tank impounding system is designed to have a minimum volumetric liquid impoundment capacity of 110 percent of the LNG tank's maximum liquid capacity, excluding displacement of the tank structure.
- 45. Cheniere Sabine shall examine provisions to retain any vapor produced along the transfer line trenches and other areas serving to direct LNG spills to associated impoundments. Measures to be considered may include, but are not limited to: vapor fencing; intermediate sump locations; or trench surface area reduction. Cheniere Sabine shall file final drawings and specifications for these measures with the Secretary for review and written approval by the Director of OEP **prior to construction**.
- 46. Cheniere Sabine shall continue to coordinate, as needed, with the U.S. Coast Guard to define the responsibilities of Cheniere Sabine security staff in supplementing other security personnel and in protecting the LNG tankers and terminal.
- 47. Cheniere Sabine shall develop emergency evacuation routes/methods in conjunction with the local emergency planning groups and town officials for Sabine Pass and other public use areas that are within any transient hazard areas. These evacuation routes/methods shall be filed with the Secretary for review and written approval by the Director of OEP **prior to construction**.

48. Cheniere Sabine shall develop an Emergency Response Plan (including evacuation) and coordinate procedures with local emergency planning groups, fire departments, state and local law enforcement, and appropriate Federal agencies. This plan should include at a minimum:
- a. designated contacts with state and local emergency response agencies;
 - b. scalable procedures for the prompt notification of appropriate local officials and emergency response agencies based on the level and severity of potential incidents;
 - c. procedures for notifying residents and recreational users within areas of potential hazard;
 - d. evacuation routes for residents of Sabine Pass and other public use areas that are within any transient hazard areas;
 - e. locations of permanent sirens and other warning devices;
 - f. an “emergency coordinator” on each LNG vessel to activate sirens and other warning devices; and
 - g. consideration of hunting activities at properties adjacent to the LNG terminal site.

The Emergency Response Plan shall be filed with the Secretary for review and written approval by the Director of OEP prior to commencement of service. Cheniere Sabine shall notify FERC staff of all meetings in advance and shall report progress on its Emergency Response Plan at 6-month intervals starting at the commencement of construction.

50. Cheniere Sabine shall continue to coordinate with the U.S. Coast Guard and Sabine Pilots Association to address the number and specifications of tugs required for safe LNG vessel operations.
51. Cheniere Sabine shall not begin construction activities **until**:
- a. the staff receives comments from the NOAA Fisheries regarding the dredge material disposal at Louisiana Point and potential impacts on juvenile Kemp’s ridley sea turtles;

- b. the staff completes formal consultation with the NOAA Fisheries, if required; and
- c. Cheniere Sabine has received written notification from the Director of OEP that construction or use of mitigation may begin.

115 FERC ¶ 61, 330
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Nora Mead Brownell, and Suedeen G. Kelly.

Sabine Pass LNG, L.P.

Docket No. CP05-396-000

ORDER GRANTING AUTHORITY UNDER SECTION 3 OF
THE NATURAL GAS ACT

(Issued June 15, 2006)

1. On July 29, 2005, Sabine Pass LNG, L.P. (Sabine LNG) filed an application under section 3 of the Natural Gas Act (NGA) to site, construct and operate additional liquefied natural gas (LNG) import facilities to be located in Cameron Parish, Louisiana. In this order, the Commission finds that the requested authorizations are not inconsistent with the public interest, subject to the conditions discussed herein.

Background

2. On December 21, 2004, the Commission issued an order authorizing Sabine LNG¹ to site, construct and operate a new LNG import terminal in Cameron Parish, Louisiana consisting of a ship turning basin and two protected ship berths, three LNG storage tanks

¹ Sabine LNG is a limited partner of Cheniere LNG, Inc. (Cheniere LNG), which in turn, is a wholly-owned subsidiary of Cheniere Energy, Inc. Cheniere LNG has a 30 percent limited partnership interest in Freeport LNG Development, L.P. and a 100 percent ownership interest in Corpus Christi LNG, L.P., both of which have obtained authorizations from the Commission to site, construct and operate LNG import facilities in Texas. In addition, Cheniere LNG has a 100 percent interest in Creole Trail LNG, L.P., which has a pending application at the Commission to site, construct and operate an LNG import terminal in Louisiana.

and associated vaporization facilities (Phase 1 Project).² In that order, the Commission also authorized an affiliate, Cheniere Sabine Pass Pipeline Company (Cheniere Sabine Pipeline)³, to construct own and operate a 16-mile pipeline connecting the LNG terminal to the pipeline's terminus at Johnson's Bayou and to offer open access transportation services on its pipeline under Part 284 of the Commission's regulations. Sabine LNG states that construction of its Phase 1 Project has commenced.

Sabine LNG's Phase 2 Proposal

3. In the instant application, Sabine LNG seeks to construct and operate additional facilities at the site of its Phase 1 Project in Cameron Parish, Louisiana. The Phase 2 Project includes three additional LNG storage tanks as well as new and expanded vaporizations systems that would increase the LNG import terminal's planned average send-out capacity from 2.6 billion cubic feet per day (Bcf/d) to 4 Bcf/d.

4. Specifically, Sabine LNG seeks authority to construct and operate:

- three 160,000 m³ single containment LNG storage tanks;
- sixteen Ambient Air Vaporization (AAV) Trains, each with a high-pressure sendout pump;
- eight Submerged Combustion Vaporization (SCV) Trains, each with a high-pressure sendout pump;
- one Pilot AAV Train;
- two additional parallel stainless steel LNG transfer lines;
- two 50 percent boil off gas (BOG) compressors;
- two additional BOG condensing systems;
- four shell-and-tube heat exchangers;
- two vapor return blowers;
- one 27 megawatt simple-cycle gas turbine generator; and
- two 30-inch sendout pipelines to new main meters.

² *Sabine Pass LNG, L.P., et al.*, 109 FERC ¶ 61,324 (2004).

³ By letter dated March 23, 2006, as amended on April 28, 2006, Cheniere Sabine Pipeline informed the Commission that on March 31, 2006, Cheniere Sabine Pipeline was merged under Delaware law into SPPC, with SPPC as the surviving legal entity. References to the pipeline in the remaining parts of the order will use the name of the new legal entity.

The Sabine LNG Phase 2 facilities are proposed to be adjacent to or within the boundary of the Phase 1 site.

5. Sabine LNG states that regasified LNG will be sent out from the LNG terminal through SPPC that was authorized with a capacity of 2.6 Bcf/d. Sabine LNG explains that two of the three customers who have contracted for capacity in the Phase 1 Project, Total LNG USA, Inc. (Total LNG) and Chevron U.S.A. (Chevron), each with a capacity reservation of 1 Bcf/d, have stated their intent not to utilize the SPPC system to transport their revaporized LNG from the terminal.⁴ Rather, Sabine LNG states, Total LNG and Chevron have indicated that they will construct or cause to be constructed other take-away pipeline facilities. Sabine LNG states that Total LNG and Chevron have executed binding precedent agreements for 100 percent of the capacity of the project proposed by Kinder Morgan Energy Partners, L.P. (KM Louisiana Pipeline) that will provide up to 3.4 Bcf/d of take away capacity from Sabine LNG.⁵ Moreover, Sabine LNG maintains that, if required, SPPC would have the capability on an engineering basis to transport the combined Phase 1 and Phase 2 volumes of 4 Bcf/d and SPPC would seek to amend its certificate authorizations to increase the capacity of the pipeline if required by actual market demand.⁶ Sabine LNG also identifies over 4 Bcf/d of existing take away capacity from the terminal through potential interconnects with downstream pipelines, as well as additional pipeline projects that have been proposed by KM Louisiana Pipeline and Sempra Energy (Port Arthur Pipeline), which combined have the potential to provide an additional 2.5 Bcf/d or more of take-away capacity.⁷

6. Sabine LNG asserts that approval of its requested authorization will foster the development of new infrastructure facilities needed to enable significant additional volumes of imported natural gas to reach gas consumers in the United States. Moreover, Sabine LNG states that it will bolster the growing LNG trade between the United States and nations with abundant supplies of natural gas.

⁴ Cheniere Resources, Inc., an affiliate of Sabine LNG, contracted for the entire 2.6 Bcf of capacity in SPPC during the open season.

⁵ See Sabine LNG's January 31, 2006 response to a Commission Staff data request, Question No. 1. Also see Kinder Morgan Louisiana Pipeline, LLC, Docket No. PF06-16-000 initiated on February 17, 2006.

⁶ See Sabine LNG's January 31, 2006 response to a Commission Staff data request, Question No. 1.

⁷ *Id.*

7. Sabine LNG requests that this authorization be granted as expeditiously as possible so that certain critical facilities may be constructed and placed in service for the 2008 heating season, and all facilities can be in service no later than the 2010 heating season.

Notice, Interventions, Comments and Protest

8. Notice of Sabine LNG's application was published in the *Federal Register* on August 19, 2005 (70 Fed. Reg. 48695). A number of timely, unopposed interventions were filed.⁸ Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure.⁹

9. Total LNG filed a late motion to intervene. The Commission finds that granting this late-filed motion to intervene at this early date will not delay, disrupt, or otherwise prejudice this proceeding, or place an additional burden on existing parties. Therefore, for good cause shown, we will grant the late-filed motion to intervene.¹⁰

10. AGA filed comments stating that it believes that imported LNG is a critical component of the future natural gas supply mix for gas consumers and the construction of additional LNG terminals is essential to achieve the necessary increase in LNG imports. It maintains that the issue of the interchangeability of natural gas should not be an obstacle to the development of LNG terminals as long as the Commission addresses the interchangeability requirements as part of its review of an applicant's proposal. To that end, AGA requests that the Commission explore with the applicant its intentions to incorporate the recommendations of the industry *White Paper on Natural Gas Interchangeability and Non-Combustion End Use* submitted to the Commission in Docket No. PL04-3-000. Specifically, AGA requests that the Commission explore: (1) whether modifications or additions to the tariffs of the interconnected interstate pipelines are necessary relative to the deliveries of LNG; and (2) the potential sources of LNG and the gas quality specifications of those sources to determine if any additional processing facilities would be necessary to accommodate those sources of LNG.

⁸ Motions to intervene were filed by the following parties: ExxonMobil Gas & Power Marketing Company, Columbia Gulf Transmission Company, Natural Gas Pipeline Company of America, the American Gas Association (AGA) and Chevron.

⁹ 18 C.F.R. § 385.214(a)(3) (2005).

¹⁰ 18 C.F.R. § 385.214(d) (2005).

11. Regarding AGA's concerns, we note that concurrently with this order, the Commission is issuing its *Policy Statement on Provisions Governing Natural Gas Quality and Interchangeability in Interstate Natural Gas Company Tariffs* in Docket No. PL04-3-000. Consistent with the Policy Statement, Sabine LNG must ensure that the regasified LNG it delivers to interconnecting pipelines meets the gas quality and interchangeability requirements of the interconnecting pipelines' tariffs. To the extent AGA seeks modifications to the tariff of an interconnecting pipeline, it should file a complaint demonstrating that the specific pipeline tariff is not just and reasonable. The Commission will evaluate the complaint on its specific merits.

Discussion

Section 3 Authorization

12. Because the proposed LNG terminal facilities will be used to import gas from foreign countries, the construction and operation of the facilities and site of their location require approval by the Commission under section 3 of the NGA.¹¹ The Commission's authority over facilities constructed and operated under section 3 includes the authority to apply terms and conditions as necessary and appropriate to ensure that the proposed construction and siting is in the public interest.¹² Section 3 provides that the Commission "shall issue such order on application..." if it finds that the proposal "will not be inconsistent with the public interest."

13. In recent years, the Commission has chosen to exercise a less intrusive degree of regulation for LNG import terminals, and has not required the applicant to offer open-

¹¹ The regulatory functions of section 3 were transferred to the Secretary of Energy in 1977 pursuant to section 301(b) of the Department of Energy Organization Act (Pub. L. No. 95-91, 42 U.S.C. §§7101 *et seq.*). In reference to regulating the imports or exports of natural gas, the Secretary subsequently delegated to the Commission the authority to approve or disapprove the construction and operation of particular facilities, the site at which facilities shall be located, and with respect to natural gas that involves the construction of new domestic facilities, the place of entry or exit for exports. DOE Delegation Order No. 00-044.00, 67 *Fed. Reg.* 8,946 (2002). Accordingly, applications for authority to import natural gas must be submitted to the Department of Energy. The Commission does not authorize importation of the commodity itself.

¹² *Distrigas Corporation v. FPC*, 495 F.2d 1057, 1063-64 (D.C. Cir. 1974), *cert. denied*, 419 U.S. 834 (1974); *Dynegy LNG Production Terminal, L.P.*, 97 FERC ¶ 61,231 (2001).

access service or to maintain a tariff or rate schedules for its terminalling service.¹³ On August 8, 2005, the Energy Policy Act of 2005 (EPAAct 2005) was signed into law.¹⁴ Section 311 of EPAAct 2005 amends section 3 of the NGA regarding the Commission's authority over the siting, construction, expansion or operation of an LNG terminal.¹⁵ As pertinent here, section 311(c) of EPAAct 2005 adds a new NGA section 3(e)(3) providing that, before January 1, 2015, the Commission shall not condition an order approving an application to site, construct, expand or operate an LNG terminal: (1) on a requirement that the LNG terminal offer service to customers other than the applicant, or any affiliate of the applicant securing the order; (2) any regulation of the rates, charges, terms or conditions of service of the LNG terminal; or (3) a requirement to file schedules or contracts related to the rates charges, terms or conditions of service of the LNG terminal. Our authorization here is consistent with new NGA section 3(e)(3).

14. The Commission recognizes the important role that LNG will play in meeting future demand for natural gas in the United States and has noted that the public interest is served through encouraging gas-on-gas competition by introducing new imported supplies.¹⁶ The record in this case shows that the Sabine LNG terminal will provide such additional supplies of natural gas to consumers. Additionally, because the project will provide incremental capacity at market-based rates, the economic risks of the proposed Phase 2 Project will be borne by Sabine LNG. Therefore, we find that, subject to the conditions imposed in this order, the Sabine LNG Phase 2 Project is not inconsistent with the public interest.

Environmental Analysis

15. On September 14, 2005, we issued a Notice of Intent to Prepare an Environmental Assessment for the Proposed Sabine LNG Phase 2 Project and Request for Comments on Environmental Issues (NOI). We received responses to the NOI from the U. S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Habitat Conservation Division, the U.S. Fish and Wildlife Service (FWS), the U.S. Army Corps of Engineers (COE), Louisiana Department of

¹³ See *Hackberry LNG Terminal, L.L.C.*, 101 FERC ¶ 61,294 (2002), *order issuing certificates and granting reh'g*, 104 FERC ¶ 61,269 (2003).

¹⁴ Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005).

¹⁵ Energy Policy Act of 2005, Pub. L. No. 109-58, § 311, 119 Stat. 594 (2005).

¹⁶ *Hackberry LNG*, 101 FERC ¶ 61,294 at P 26 (2002).

Wildlife and Fisheries, and the U. S. Coast Guard (Coast Guard). We also received comments from state and local representatives in support of the project. Our staff addressed all substantive comments in the environmental assessment for Sabine LNG's proposal. The EA addresses geology and soils, land use, water resources, fisheries, and wetlands, cultural resources, vegetation and wildlife, air quality and noise, endangered and threatened species, hazardous waste, cumulative impacts, and reliability and public safety.

16. The Coast Guard cooperated in the preparation of the EA and plays an important role with regard to maritime issues. With regard to vessel transit to and from the Sabine LNG terminal, the Coast Guard has identified no constraints. Further, at this time no outstanding safety and security issues have been identified.

17. The Coast Guard issued, on June 14, 2005, a Navigation and Vessel Inspection Circular – Guidance on Assessing the Suitability of a Waterway for Liquefied Natural Gas (LNG) Marine Traffic (NVIC 05-05). The purpose of this NVIC 05-05 is to provide Coast Guard Captains of the Port (COTP)/Federal Maritime Security Coordinators (FMSC), members of the LNG industry, and port stakeholders with guidance on assessing the suitability and security of a waterway for LNG marine traffic. It provides specific guidance on the timing and scope of the waterway suitability assessment (WSA), which will address both safety and security of the port, the facility, and the vessels transporting the LNG.

18. The WSA process addresses the transportation of LNG from an LNG tanker's entrance into U.S. territorial waters, through its transit to and from the LNG receiving facility, and includes operations at the vessel/facility interface. In addition, the WSA addresses the navigational safety issues and port security issues introduced by the proposed LNG operations. The Coast Guard's letter to FERC on the WSA identifies the relevant safety and security issues from the broad viewpoint of impact on the entire port, as well as provides a detailed review of specific points of concern along the LNG tanker's proposed transit route. The WSA will be reviewed on an annual basis and updated as needed until the facility is placed in service.

19. On August 15, 2005, Sabine LNG submitted a WSA for the proposed project to the Captain of the Port for Coast Guard Marine Safety Unit Port Arthur. The Coast Guard, with input from various stakeholders, which included the marine pilots, towing industry representatives, members of the Area Harbor Safety Committee, and the Area Maritime Security Committee, has completed a review of Sabine LNG's WSA in accordance with the guidance in NVIC 05-05. The WSA review focused on the navigation safety and maritime security risks posed by LNG marine traffic, and the measures needed to responsibly manage these security risks.

20. On March 7, 2006, the Coast Guard sent a letter to FERC, based on the above WSA review, providing input on the capability of the port community to implement the risk management measures necessary to responsibly manage the risks of LNG marine traffic in the port. As described in this document, the Coast Guard has preliminarily determined that the Sabine Pass Channel to the proposed LNG terminal in Cameron Parish, Louisiana may be suitable for accommodating the type and frequency of LNG vessels being proposed by the applicant. This determination, however, is preliminary because the required NEPA analysis has not yet been completed. This determination is also contingent upon the port security community having the appropriate resources to implement all the measures necessary to responsibly manage the safety and security risks of LNG marine traffic in this area. Once these plans are finalized and the resources required to implement them have been identified, Sabine LNG will be able to more specifically discuss the funding of such resources. In order to better define how the potential burden on local communities would be addressed, the final EA recommended that Sabine LNG provide a plan that identifies the mechanisms for funding project-specific security/emergency management costs that would be imposed on state agencies and local communities. We agree with that recommendation.

21. The Coast Guard's letter to FERC discusses the relevant safety and security issues from the broad viewpoint of impact on the entire port, as well as provides a detailed review of specific points of concern along the LNG tanker's proposed transit route. A detailed supplemental letter, also based on the WSA review, describing the conceptual prevention/mitigation strategies, along with resource needs, has also been sent from the Coast Guard to the FERC on March 8, 2006. If the Coast Guard issues a Letter of Recommendation finding the waterway suitable for LNG marine traffic, the security measures outlined in the letters to FERC will be further developed into a detailed *Liquefied Natural Gas Vessel Management and Emergency Plan*, which would become the basis for appropriate security measures for each Maritime Security threat level. This plan would clearly spell out roles, responsibilities and specific procedures for an LNG vessel transiting the Sabine Pass Channel up to the Sabine LNG terminal, as well as for all agencies involved in implementing security and safety during the operation. It would be required that, prior to the LNG vessel being granted permission to enter the Sabine Pass Channel, both the vessel and facility must be in full compliance with the appropriate requirements of the Maritime Transportation Security Act and International Ship and Port Facility Security Code, and the security protocols to be established by the COTP in the *Liquefied Natural Gas Vessel Management and Emergency Plan*. The plan may include security measures such as: Coast Guard and other law enforcement agency vessels to enforce safety and security zones around the LNG vessels while in transit and moored at the terminal; shoreside surveillance and monitoring along designated sections of the transit route; and other prevention/mitigation strategies.

22. The *Liquefied Natural Gas Vessel Management and Emergency Plan* would be a dynamic document that would be prepared well before import operations would commence, and the port's overall security picture may change over that time period. New port activities may commence, infrastructure may be added, or population density may change. Improvements in technology to detect, deter and defend against intentional acts may also develop. Therefore, the final EA recommended that Sabine LNG annually review its waterway suitability assessment relating to LNG vessel traffic for the project; update the assessment to reflect changing conditions which may impact the suitability of the waterway for LNG marine traffic; provide the updated assessment to the cognizant COTP/Federal Maritime Security Coordinator (COTP/FMSC) for review and validation and if appropriate, further action by the COTP/FMSC relating to LNG vessel traffic; and provide a copy to FERC staff. We concur with this recommendation.

23. The EA evaluated the safety of both the proposed Phase 2 Project and the related LNG vessel transit through the Sabine-Neches Waterway. The analysis identified the principal properties and hazards associated with LNG, presented a summary of the design and technical review of the cryogenic aspects of the LNG terminal, discussed the types of storage and retention systems, analyzed the thermal radiation and flammable vapor cloud hazards resulting from credible LNG spills, analyzed the safety aspects of LNG transportation by ship, and reviewed issues related to security and terrorism. Requirements for safety of the terminal are in the Coast Guard regulations in 33 CFR Part 127 and for maintaining security are in 33 CFR Part 105 and will be approved by the Captain of the Port.

24. With respect to the onshore facility, a cryogenic design and technical review of the proposed terminal design and safety systems was completed and reported in the EA. That review noted several areas of concern, and as a result, the EA recommends 54 Environmental Conditions to make certain modifications to the terminal design. Information pertaining to these modifications is to be filed for review and approval by the Director of OEP prior to initial site preparation, prior to construction of final design, prior to commissioning, or prior to commencement of service as indicated by each specific recommendation. The EA also evaluated the thermal radiation and flammable vapor dispersion exclusion zones of the proposed LNG terminal. The analysis found that no excluded uses are within these areas.

25. In addition, the EA discussed the Department of Energy's (DOE) study by Sandia National Laboratories entitled, *Guidance on Risk Analysis and Safety Implications of a Large Liquefied Natural Gas (LNG) Spill Over Water (Sandia Report) December 2004*. The report evaluated an LNG cargo tank breach using modern finite element modeling and explosive shock physics modeling to estimate a range of breach sizes for credible accidental and intentional LNG spill events. Based on the Sandia Report breach sizes, thermal radiation and flammable vapor hazard distances were calculated in the EA for an

accident or an attack on an LNG vessel. For the nominal intentional breach scenarios (5- to 7-square-meter holes in an LNG cargo tank), the estimated distances ranged from: 4,182 to 4,652 feet for a thermal radiation of 1,600 Btu/ft²-hr, the level which is hazardous for persons located outdoors and unprotected; 3,232 to 3,591 feet for 3,000 Btu/ft²-hr, an acceptable level for wooden structures; and 1,934 to 2,143 feet for 10,000 Btu/ft²-hr, a level sufficient to damage process equipment, for these size holes respectively.

26. Based on the extensive operational experience of LNG shipping, the structural design of an LNG vessel, and the operational controls imposed by the Coast Guard and the local pilots, a cargo containment failure and subsequent LNG spill from a vessel casualty – collision, grounding, or allision – is highly unlikely. For similar reasons, an accident involving the onshore LNG import terminal is unlikely to affect the public. As a result, the EA determined that the risk to the public from accidental causes is negligible.

27. Unlike accidental causes, historical experience provides little guidance in estimating the probability of a terrorist attack on an LNG vessel or onshore storage facility. For a new LNG import terminal proposal having a large volume of energy transported and stored near populated areas, the perceived threat of a terrorist attack is a serious concern of the local population and requires that resources be directed to mitigate possible attack paths. If the Coast Guard issues a Letter of Recommendation finding the waterway suitable for LNG marine traffic, the operational restrictions that would be imposed by the Sabine Pilots on LNG vessel movements through this area, as well as the requirements that the Coast Guard would impose, would minimize the possibility of a hazardous event occurring along the vessel transit area. While the risks associated with the transportation of any hazardous cargo can never be entirely eliminated, we are confident that they can be reduced to minimal levels and that the public will be well protected from harm.

28. Based on the discussion in the EA, we conclude that if the proposed facilities are constructed or operated in accordance with Sabine LNG's application and supplements, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

29. Any state or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this authorization. The Commission encourages cooperation between interstate pipelines and local authorities. However, this does not mean that state and local agencies, through application of state or

local laws, may prohibit or unreasonably delay the construction or operation of facilities approved by this Commission.¹⁷

30. Sabine Pass LNG shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Sabine Pass LNG. Sabine Pass LNG shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

Conclusion

31. For the reasons set forth herein, and subject to the conditions set forth below, we find that Phase 2 of Sabine LNG's import terminal is not inconsistent with the public interest under NGA section 3. Thus, we grant the requested authorizations to Sabine LNG.

32. At a hearing held on June 15, 2006, the Commission on its own motion received and made a part of the record in this proceeding all evidence, including the application and exhibits thereto, submitted in support of the authorizations sought herein, and upon consideration of the record,

The Commission orders:

(A) In Docket No. CP05-396-000, Sabine LNG is hereby authorized under section 3 of the NGA to site, construct, and operate additional facilities at its LNG terminal in Cameron Parish, Louisiana, as more fully described in this order and in the application.

(B) Sabine LNG shall comply with the environmental conditions contained in the Appendix to this order.

(C) Sabine LNG shall notify the Commission's environmental staff by telephone or facsimile of any environmental noncompliance identified by other federal, state, or local agencies on the same day that such agency notifies Sabine LNG. Sabine

¹⁷ See, e.g., *Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P., et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

LNG shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

(D) The untimely motion to intervene of Total LNG is granted.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.

APPENDIX

Environmental Conditions for the Sabine LNG Phase 2 Project

1. Sabine LNG shall follow the construction procedures and mitigation measures described in its application, supplemental filings (including responses to staff data requests) and as identified in the EA, unless modified by the Order. Sabine LNG must:
 - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary;
 - b. justify each modification relative to site-specific conditions;
 - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
 - d. receive approval in writing from the Director of the Office of Energy Project (OEP) **before using that modification.**
2. For liquefied natural gas (LNG) facilities, the Director of OEP has delegated authority to take all steps necessary to ensure the protection of life, health, property, and the environment during construction and operation of the Project. This authority shall include:
 - a. stop work authority and authority to cease operation; and
 - b. the design and implementation of any additional measures deemed necessary to assure continued compliance with the intent of the conditions of the Order.
3. **Prior to any construction**, Sabine LNG shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors, and contractor personnel will be informed of the environmental inspector's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities.
4. The authorized facility locations shall be as shown in the EA. **As soon as they are available, and before the start of construction**, Sabine LNG shall file with the Secretary any revised detailed maps/sheets and aerial photographs at a scale not smaller than 1:6,000 with station positions for all facilities approved by the Order. All requests for modifications of environmental conditions of the Order or

site-specific clearances must be written and must reference locations designated on these detailed maps/sheets and aerial photographs.

5. Sabine LNG shall file with the Secretary detailed maps/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all facility relocations, staging areas, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the maps/sheets/aerial photographs. Each area must be approved in writing by the Director of OEP **before construction** in or near that area.
6. **At least 60 days before the start of construction**, Sabine LNG shall file an initial Implementation Plan with the Secretary for review and written approval by the Director of OEP describing how Sabine LNG will implement the mitigation measures required by the Order. Sabine LNG must file revisions to the plan as schedules change. The plan shall identify:
 - a. how Sabine LNG will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
 - b. the number of environmental inspectors assigned to the project, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;
 - c. company personnel, including environmental inspectors and contractors, who will receive copies of the appropriate material;
 - d. the training and instructions Sabine LNG will give to all personnel involved with construction and restoration (initial and refresher training as the Project progresses and personnel change), with the opportunity for OEP staff to participate in the training session(s);
 - e. the company personnel (if known) and specific portion of Sabine LNG' organization having responsibility for compliance;
 - f. the procedures (including use of contract penalties) Sabine LNG will follow if noncompliance occurs; and
 - g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:

- i. the completion of all required surveys and reports;
 - ii. the mitigation training of onsite personnel;
 - iii. the start of construction; and
 - iv. the start and completion of restoration.
7. The environmental complaint resolution procedure established for the Sabine LNG Phase 1 Project shall be used for this Project.
8. Sabine LNG shall employ an environmental inspector. The environmental inspector shall be:
 - a. responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other grants, permits, certificates, or other authorizing documents;
 - b. responsible for evaluating the construction contractor's implementation of the environmental mitigation measures required in the contract (see condition 7 above) and any other authorizing document;
 - c. empowered to order correction of acts that violate the environmental conditions of the Order, and any other authorizing document;
 - d. a full-time position, separate from all other activity inspectors;
 - e. responsible for documenting compliance with the environmental conditions of the Order, as well as any environmental conditions/permit requirements imposed by other federal, state, or local agencies; and
 - f. responsible for maintaining status reports.
9. Sabine LNG shall file updated status reports prepared by the environmental inspector with the Secretary **on a weekly basis until all construction and restoration activities are complete**. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports shall include:
 - a. the current construction status of the Project, work planned for the following reporting period, and any schedule changes for stream crossings or work in other environmentally sensitive areas;
 - b. a listing of all problems encountered and each instance of noncompliance observed by the environmental inspector(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state, or local agencies);

- c. corrective actions implemented in response to all instances of noncompliance, and their cost;
 - d. the effectiveness of all corrective actions implemented;
 - e. a description of any landowner/resident complaints which may relate to compliance with the requirements of the Order, and the measures taken to satisfy their concerns; and
 - f. copies of any correspondence received by Sabine LNG from other federal, state or local permitting agencies concerning instances of noncompliance, and Sabine LNG' response.
10. Sabine LNG shall receive written authorization from the Director of OEP **before commencing service of the Project**. Such authorization will only be granted following a determination that rehabilitation and restoration of areas affected by the Project are proceeding satisfactorily.
11. **Within 30 days of placing the authorized facilities in service**, Sabine LNG shall file an affirmative statement with the Secretary, certified by a senior company official:
- a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
 - b. identifying which of the conditions Sabine LNG has complied with or will comply with. This statement shall also identify any areas affected by the Project where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.
12. Sabine LNG shall commit to implementing the U.S. Fish and Wildlife Service (FWS) guidelines, "Service Interim Guidelines for Recommendations on Communications Tower Siting, Construction, Operation and Decommissioning", as they would apply to the LNG storage tanks and Ambient Air Vaporization Trains (AAV Trains), to limiting the intensity and number of lights on these structures to that required for security and operations, and to maintain these structures in a non-reflective state.
13. Sabine LNG **shall not begin construction** of any facilities associated with the Project **until** it files a copy of the Coastal Zone Management Plan (CZMP) consistency determination issued by the Louisiana Department of Natural Resources (LDNR) with the Secretary.

14. When the Sabine Pass Battleground State Park is open to camping, Sabine LNG shall limit pile driving activities to daytime, weekday hours only. Should weekend and/or 24 hour pile driving be required to meet the construction schedule, Sabine LNG shall conduct a noise survey at the Sabine Pass Battleground State Park to establish actual noise levels during pile driving activities. If the actual noise levels during pile driving activities exceed ambient nighttime noise levels, then Sabine LNG shall develop a noise mitigation plan to reduce noise levels during the weekend and/or nighttime period and document that the noise mitigation plan effectively reduces noise from construction pile driving activities. The noise survey, noise mitigation plan, and documentation shall be filed with the Secretary, for review and written approval by the Director of OEP, **prior to the initiation of any weekend or nighttime pile driving activities.**
15. Sabine LNG shall file a noise survey with the Secretary **no later than 60 days after placing the Phase 2 facilities into service.** If the noise attributable to the operation of the LNG terminal exceeds a day-night sound level (L_{dn}) of 55 dBA at any nearby noise sensitive area (NSA), Sabine LNG shall file a report on what changes are needed and shall install additional noise controls to meet that level within 1 year of the in-service date. Sabine LNG shall confirm compliance with this requirement by filing a second noise survey with the Secretary **no later than 60 days after it installs the additional noise controls.**

The following measures shall apply to the LNG terminal design and construction details. **Information pertaining to these specific recommendations shall be filed with the Secretary for review and approval by the Director of OEP either: prior to initial site preparation; prior to construction of final design; prior to commissioning; or prior to commencement of service as indicated by each specific recommendation.** Items relating to Resource Report 13-Engineering and Design Material and security should be submitted as critical energy infrastructure information (CEII) pursuant to 18 Code of Federal Regulations (CFR) § 388.112 and PL01-1. Information pertaining to items such as: offsite emergency response; procedures for public notification and evacuation; and construction and operating reporting requirements would be subject to public disclosure. This information should be submitted a minimum of 30 days before approval to proceed is required.

16. A complete plan and list of the hazard detection equipment shall be filed **prior to initial site preparation.** The information shall include a list with the instrument tag number, type and location, alarm locations, and shutdown functions of the proposed hazard detection equipment. Plan drawings shall clearly show the location of all detection equipment.

17. Sabine LNG shall provide a technical review of its proposed facility design that:
- Identifies all combustion/ventilation air intake equipment and the distances to any possible hydrocarbon release (LNG, flammable refrigerants, flammable liquids and flammable gases).
 - Demonstrates that these areas are adequately covered by hazard detection devices and indicates how these devices would isolate or shutdown any combustion equipment whose continued operation could add to or sustain an emergency.

Sabine LNG shall file this review **prior to initial site preparation.**

18. A complete plan and list of the fixed and wheeled dry-chemical, fire extinguishing, and high expansion foam hazard control equipment shall be filed **prior to initial site preparation.** The information shall include a list with the equipment tag number, type, size, equipment covered, and automatic and manual remote signals initiating discharge of the units. Plan drawings shall clearly show the planned location of all fixed and wheeled extinguishers.
19. Facility plans showing the proposed location of, and area covered by, each monitor, hydrant, deluge system, hose and sprinkler, as well as piping and instrumentation diagrams, of the fire water system shall be filed **prior to initial site preparation.**
20. A copy of the hazard design review and list of recommendations that are to be incorporated in the final facility design shall be provided **prior to initial site preparation.**
21. Procedures shall be developed for offsite contractors' responsibilities, restrictions, limitations, and supervision of these contractors by Sabine LNG staff **prior to initial site preparation.**
22. The **final design** shall include layout provisions to install equipment that may be required to be installed to disperse fog generated by the proposed ambient vaporizers.
23. The **final design** shall provide a foghorn alarm system to alert marine traffic to fog on the waterway that may be generated by the ambient vaporizer system.
24. The **final design** shall include spill and leak detection in the jetty isolation valve area.
25. The **final design** of the hazard detection equipment shall identify manufacturer

and model.

26. The **final design** shall specify that all hazard detectors be installed with redundancy, fault detection and fault alarm monitoring.
27. The **final design** of the hazard detection equipment shall provide flammable gas and UV/IR hazard detectors with local instrument status indication as an additional safety feature.
28. The **final design** of the fixed and wheeled dry-chemical, fire extinguishing and high expansion foam hazard control equipment shall identify manufacturer and model.
29. The **final design** shall include a spectacle blind in the vapor return line, between the vapor block valve and the connection to the LNG unloading line of the dual service unloading arm, on each platform.
30. The **final design** shall include details of the LNG flow measurement system provided for the top and bottom fill to each tank.
31. The **final design** shall include a discretionary vent for each tank, to be operated through the distributed control system (DCS).
32. The **final design** shall include provisions to flare all low pressure boil-off and flash gas.
33. The **final design** shall include drawings and specifications of the spill protection system to be applied to the LNG tank roof and outer shell.
34. The **final design** shall include details of the storage tank piping support structure.
35. The **final design** shall include details of the LNG tank tilt settlement and differential settlement limits, between each LNG tank and piping and procedures to be implemented in the event that limits are exceeded.
36. The **final design** shall include a cool down bypass valve round the discharge control valve of each in-tank pump.
37. The **final design** shall include a recycle line from the end of the LNG sendout pump suction header to storage. The line shall be sized to allow the boil-off gas (BOG) condenser and suction header to be stabilized prior to pump cool down.
38. The **final design** shall specify that at the maximum LNG specific gravity, specified for the design of the system and at full LNG tank conditions and

maximum BOG condenser operating pressure, the discharge pressure of the LNG sendout pumps shall not exceed 90 percent of the LNG vaporizer design pressure.

39. The **final design** shall include installation of a check valve down stream of the minimum flow recycle line in the secondary pump discharge piping.
40. The **final design** shall include automatic shutoff isolation valves for the suction and discharge of the return blowers.
41. The **final design** shall include provisions to install temporary high pressure boil-off compression in the event that sendout operation is curtailed, or ceased, for a period in excess of thirty days. Details shall include plans and drawings of the BOG recovery system and specifications of the equipment and compressors to be installed.
42. The **final design** shall include details of the proposed installation of the liquid removal systems associated with the operation of the BOG compressor KO drum V-103 and liquid drain pot V-104.
43. The **final design** shall include provisions to alarm the condition of high liquid level in the drip leg and prevent the return blowers from operating in the event of a High-High level.
44. The **final design** shall include provisions to pipe unloading line relief valves and other LNG reliefs and vents directly to storage, or to an intermediate vent vessel.
45. The **final design** shall include an LNG sample vaporization system.
46. The **final design** shall include a fire protection evaluation carried out in accordance with the requirements of National Fire Protection Association (NFPA) 59A, Chapter 9.1.2.
47. The **final design** shall include details of the shut-down logic, including cause and effect matrices for alarms and shutdowns.
48. The **final design** shall include emergency shutdown of equipment and systems activated by hazard detection devices for flammable gas, fire and cryogenic spills, when applicable.
49. The **final design** shall include details of the air gaps to be installed downstream of all seals or isolations installed at the interface between a flammable fluid system and an electrical conduit or wiring system. Each air gap shall vent to a safe location and be equipped with a leak detection device that: shall continuously

monitor for the presence of a flammable fluid; shall alarm the hazardous condition; and shall shutdown the appropriate systems.

50. The **final design** shall include a hazard and operability (HAZOP) review of the completed design. A copy of the review and a list of the recommendations shall be provided.
51. All valves including drain, vent, instrument root, main and car sealed valves shall be tagged in the field **during construction and prior to commissioning**.
52. Copies of the Coast Guard security plan and vessel operating plan shall be filed **prior to commissioning**.
53. Operation and Maintenance procedures and manuals, as well as safety procedure manuals, shall be filed **prior to commissioning**.
54. The contingency plan for failure of the LNG tank outer shell shall be filed prior to commissioning.
55. A copy of the criteria for horizontal and rotational movement of the inner vessel for use during and after cool down shall be filed **prior to commissioning**.
56. The FERC staff shall be notified of any proposed revisions to the security plan and physical security of the facility **prior to commencement of service**.
57. Progress on the construction of the LNG terminal shall be reported **in monthly reports** filed with the Secretary. Details shall include a summary of activities, problems encountered and remedial actions taken. Problems of significant magnitude shall be reported to the FERC **within 24 hours**.

In addition, we recommend that the following measures shall apply **throughout the life of the facility**:

58. The facility shall be subject to regular FERC staff technical reviews and site inspections on **at least a biennial basis** or more frequently as circumstances indicate. Prior to each FERC staff technical review and site inspection, the Company shall respond to a specific data request including information relating to possible design and operating conditions that may have been imposed by other agencies or organizations. Up-to-date detailed piping and instrumentation diagrams reflecting facility modifications and provision of other pertinent information not included in the semi-annual reports described below, including

facility events that have taken place since the previously submitted semi-annual report, shall be submitted.

59. **Semi-annual** operational reports shall be filed with the Secretary to identify changes in facility design and operating conditions, abnormal operating experiences, activities (including ship arrivals, quantity and composition of imported LNG, vaporization quantities, boil-off/flash gas, etc.), plant modifications including future plans and progress thereof. Abnormalities shall include, but not be limited to: unloading/shipping problems, potential hazardous conditions from offsite vessels, storage tank stratification or rollover, geysering, storage tank pressure excursions, cold spots on the storage tanks, storage tank vibrations and/or vibrations in associated cryogenic piping, storage tank settlement, significant equipment or instrumentation malfunctions or failures, non-scheduled maintenance or repair (and reasons thereof), relative movement of storage tank inner vessels, vapor or liquid releases, fires involving natural gas and/or from other sources, negative pressure (vacuum) within a storage tank and higher than predicted boil-off rates. Adverse weather conditions and the effect on the facility also shall be reported. Reports shall be submitted **within 45 days** after each period ending **June 30 and December 31**. In addition to the above items, a section entitled "Significant plant modifications proposed for the next 12 months (dates)" also shall be included in the semi-annual operational reports. Such information will provide the FERC staff with early notice of anticipated future construction/maintenance projects at the LNG facility.
60. In the event the temperature of any region of any outer tank shell, including pipe supports, becomes less than the minimum specified operating temperature for the material, the Commission shall be notified **within 24 hours** and procedures for corrective action shall be specified.
61. Significant non-scheduled events, including safety-related incidents (i.e., LNG or natural gas releases, fires, explosions, mechanical failures, unusual over pressurization, and major injuries) and security related incidents (i.e., attempts to enter site, suspicious activities) shall be reported to FERC staff. In the event an abnormality is of significant magnitude to threaten public or employee safety, cause significant property damage, or interrupt service, notification shall be made immediately, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency procedure. In all instances, notification should be made to FERC staff **within 24 hours**. This notification practice shall be incorporated into the LNG facility's emergency plan. Examples of reportable LNG-related incidents include:
- a. fire;

- b. explosion;
- c. estimated property damage of \$50,000 or more;
- d. death or personal injury necessitating in-patient hospitalization;
- e. free flow of LNG for five minutes or more that results in pooling;
- f. unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability, structural integrity, or reliability of an LNG facility that contains, controls, or processes gas or LNG;
- g. any crack or other material defect that impairs the structural integrity or reliability of an LNG facility that contains, controls, or processes gas or LNG;
- h. any malfunction or operating error that causes the pressure of a pipeline or LNG facility that contains or processes gas, or LNG, to rise above its maximum allowable operating pressure (or working pressure for LNG facilities) plus the build-up allowed for operation of pressure limiting or control devices;
- i. a leak in an LNG facility that contains or processes gas or LNG that constitutes an emergency;
- j. inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank;
- k. any safety-related condition that could lead to an imminent hazard and cause (either directly or indirectly by remedial action of the operator), for purposes other than abandonment, a 20 percent reduction in operating pressure or shutdown of operation of a pipeline or an LNG facility that contains or processes gas or LNG;
- l. safety-related incidents to LNG vessels occurring at or en route to and from the LNG facility; or
- m. an event that is significant in the judgment of the operator and/or management even though it did not meet the above criteria or the guidelines set forth in an LNG facility's incident management plan.

In the event of an incident, the Director of OEP has delegated authority to take whatever steps are necessary to ensure **operational** reliability and to protect human life, health, property or the environment, including authority to direct the LNG facility to cease operations. Following the initial company notification, FERC staff would determine the need for a separate follow-up report or follow-up in the upcoming semi-annual operational report. All company follow-up reports shall include investigation results and recommendations to minimize a reoccurrence of the incident.

62. **Prior to installation** of the full-scale ambient air vaporizer system, Sabine LNG shall file with the Secretary for review and written approval by the Director of OEP, the following:
- a. a report on the results of the single ambient air vaporizer train field test which addresses any reliability or operability problems encountered and which evaluates the accuracy of the near- and far-field fog studies;
 - b. the final design of the ambient air vaporizer system and equipment that may be required to disperse fog as a result of the operation of the test train and validation of the near- and far-field fog studies; and
 - c. mitigation and operating procedures proposed to address public and operator safety, near- and far-field fog impacts, and the facility's reliability and operability.
63. Sabine LNG shall reevaluate the LNG storage tank impoundment design to ensure that the impoundment provides a volumetric capacity of 110 percent of the LNG tank's maximum liquid capacity. This information shall be filed with the Secretary for review and written approval by the Director of OEP **prior to initial site preparation**.
64. Sabine LNG shall provide a revised ambient air vaporizer sump design which demonstrates that:
- a. the sump is adequately sized for all spills which would potentially drain to the sump; and
 - b. the continuous presence of defrost water in the sump would not decrease the required spill containment volume.
- The revised design shall be filed with **the** Secretary for review and written approval by the Director of OEP **prior to initial site preparation**.
65. Sabine LNG shall examine provisions to retain any vapor produced along the transfer line trenches and other areas serving to direct LNG spills to associated impoundments. Measures to be considered may include, but are not limited to: vapor fencing; intermediate sump locations; or trench surface area reduction. Sabine LNG shall file final drawings and specifications for these measures with the Secretary 30 days **prior to initial site preparation** for review and approval by the Director of OEP.
66. **Prior to commissioning**, Sabine LNG shall coordinate, as needed, with the Coast

Guard to define the responsibilities of Sabine LNG security staff in supplementing other security personnel and in protecting the LNG ships and the terminal.

67. Sabine LNG shall develop an Emergency Response Plan (including evacuation) and coordinate procedures with the Coast Guard, state, county, and local emergency planning groups, fire departments, state and local law enforcement, and appropriate federal agencies. This plan should include at a minimum:
- a. designated contacts with state and local emergency response agencies;
 - b. scalable procedures for the prompt notification of appropriate local officials and emergency response agencies based on the level and severity of potential incidents;
 - c. procedures for notifying residents and recreational users within areas of potential hazard;
 - d. evacuation routes/methods for residents along the route of the LNG vessel transit;
 - e. locations of permanent sirens and other warning devices; and
 - f. an “emergency coordinator” on each LNG vessel to activate sirens and other warning devices.

The Emergency Response Plan should be filed with the Secretary for review and written approval by the Director of OEP **prior to initial site preparation for the Phase 2 facilities**. Sabine LNG shall notify FERC staff of all planning meetings in advance and shall report progress on the development of its Emergency Response Plan **at 3-month intervals**.

68. The Emergency Response Plan shall include a Cost-Sharing Plan identifying the mechanisms for funding all project-specific security/emergency management costs that would be imposed on state and local agencies. In addition to the funding of direct transit-related security/emergency management costs, this comprehensive plan shall include funding mechanisms for the capital costs associated with any necessary security/emergency management equipment and personnel base. The Cost-Sharing Plan shall be filed with the Secretary for review and written approval by the Director of OEP **prior to initial site preparation**.
69. Sabine LNG shall **annually** review its waterway suitability assessment relating to LNG vessel traffic for the project; update the assessment to reflect changing conditions which may impact the suitability of the waterway for LNG marine traffic; provide the updated assessment to the cognizant Captains of the Port/Federal Maritime Security Coordinator (COTP/FMSC) for review and

validation and if appropriate, further action by the COTP/FMSC relating to LNG vessel traffic; and provide a copy to the FERC staff.

70. **Prior to accepting ships greater than 140,000 m³ in capacity**, Sabine LNG shall provide the necessary information to demonstrate that the transient hazard areas identified in the EA are applicable. Sabine LNG shall file this information with the Secretary for review and written approval of the Director of OEP. This information shall also be provided to the Coast Guard.